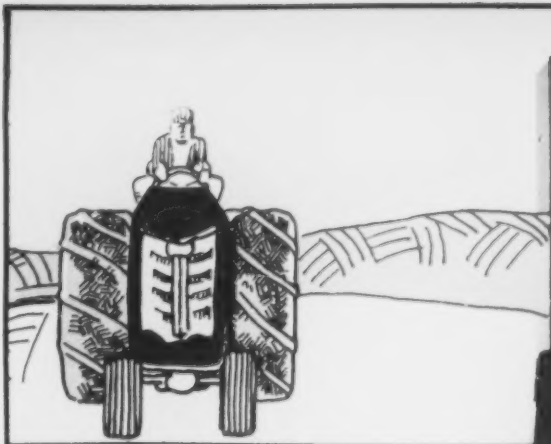


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VIRGINIA ECONOMIC INDICATORS

VOL. XX NO. 3

3rd QUARTER 1988 DATA



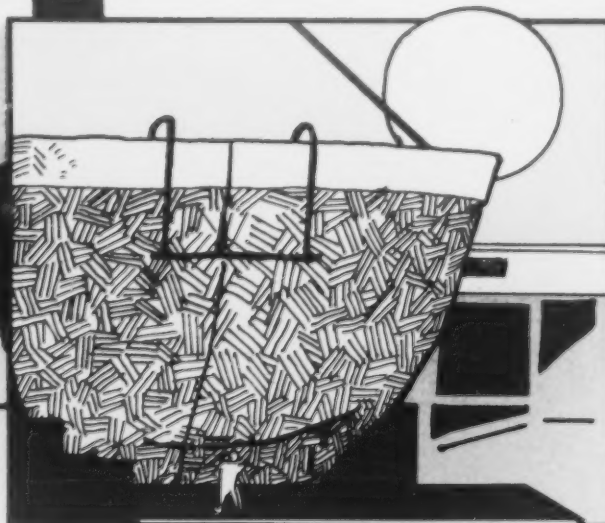
AGRICULTURE



RETAIL SALES



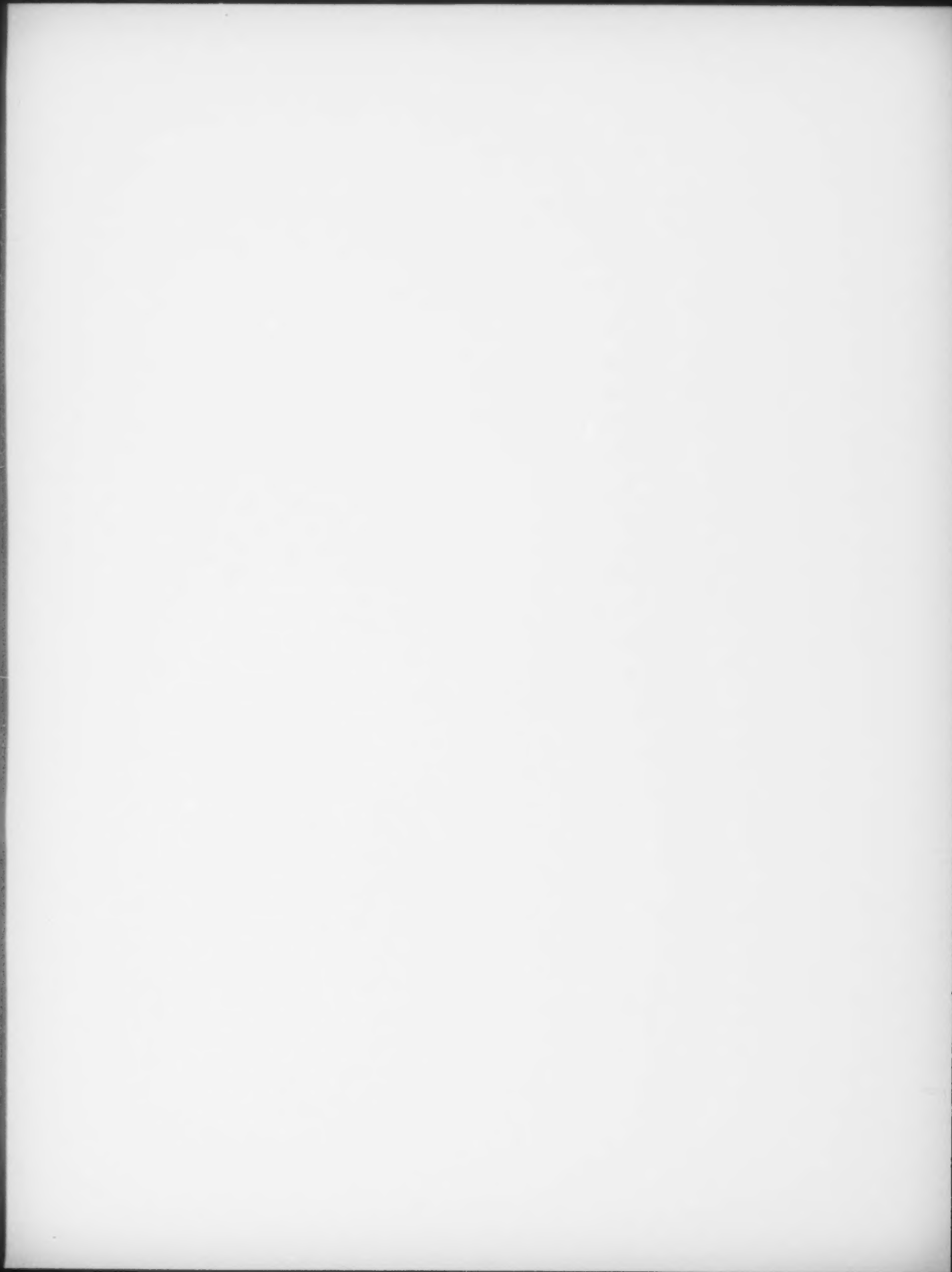
MINING



SHIPBUILDING



Virginia Employment Commission



FOREWORD

This publication is designed to depict the movement of Virginia's key economic indicators in graphic and tabular form with accompanying narrative analysis.

We welcome any comments, suggestions, or questions concerning Virginia Economic Indicators. Please contact Dolores A. Esser, Director, Economic Information Services Division, P. O. Box 1358, Richmond, Virginia 23211, (804) 786-7496, for additional information or explanation of the contents of this document.

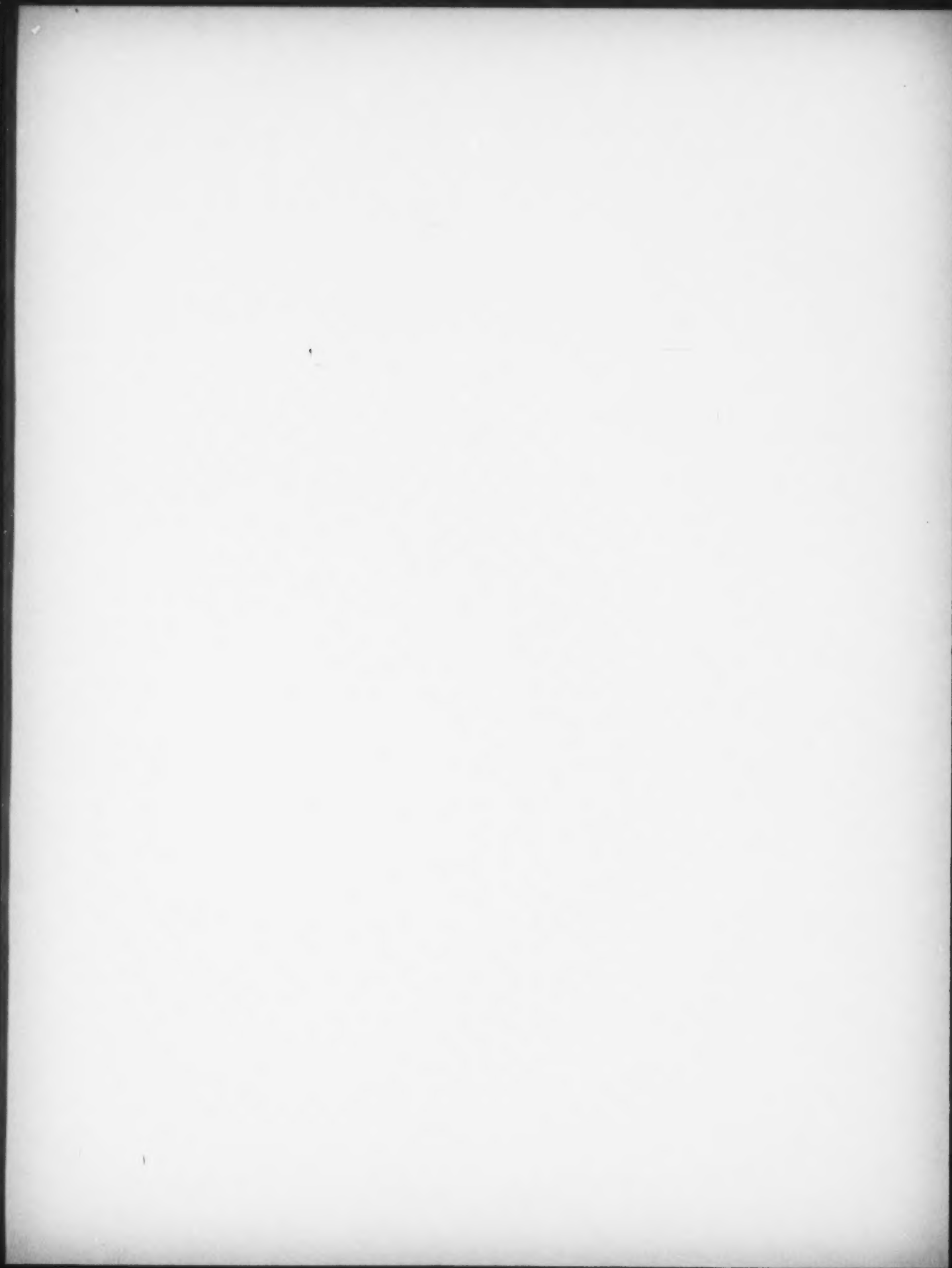


TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
FOREWORD.....	iii	BUSINESS INDICATORS, JANUARY 1987 TO SEPTEMBER 1988.....	10
ECONOMIC OUTLOOK - U. S. AND VIRGINIA.....	1	o New Business Incorporations	
HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS, THIRD QUARTER 1988.....	3	o Valuation of Building Permits	
VIRGINIA INDICATORS, THIRD QUARTER DATA.....	4	o New Vehicle Registrations	
EMPLOYMENT AND UNEMPLOYMENT INDICATORS, JANUARY 1987 TO SEPTEMBER 1988.....	6	o Electrical Power Sales	
o Nonagricultural Wage & Salary Employment		o Taxable Retail Sales	
o Manufacturing Employment		DATA SUMMARY, SEPTEMBER 1988.....	12
o Total Unemployment Rate		SUMMARY: MOVEMENT OF INDICATORS, JANUARY 1987 TO SEPTEMBER 1988.....	12
o Average Weekly Initial Claims		DATA SUMMARY, JULY AND AUGUST 1988.....	13
o Average Weekly Insured Unemployment Rate		THE VIRGINIA LEADING AND COINCIDENT INDEXES.....	14
o U. I. Final Payments		IMPACT OF TECHNOLOGY IN VIRGINIA.....	16
MANUFACTURING PRODUCTION WORKER INDICATORS, JANUARY 1987 TO SEPTEMBER 1988.....	8	HISTORICAL SUMMARY, PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE.....	21
o Average Weekly Hours			
o Average Manhours			
o Average Hourly Earnings			
o Average Weekly Earnings			

ECONOMIC OUTLOOK - U. S.

VOL. XX, NO. 3

THIRD QUARTER DATA

1989, 1990, and 1991 U. S. Forecast Highlights

- o Enormous export expansions coupled with surges in both domestic consumer spending and business capital investment make CY 1988 the third strong year in a row with Gross National Product (GNP) rising at an annual rate of 3.9 percent.
 - A typically prosperous presidential election year sees national unemployment fall to the lowest level in over a decade while U. S. employment surges to a record 115 million.
 - By year's end, however, signs of softness begin to emerge as car, retail, and housing sales become just so-so, higher interest rates impede loan demand, employment rises less rapidly, and inflation creeps up to 4.1 percent annually from a 3.7 percent level in CY 1987.
- o The slower growth pattern interacts on the economy in CY 1989 as business takes a wait and see attitude toward a new administration in Washington.
 - After a fairly good first quarter, sluggishness prevails, and real growth is 1.5 percent or less per quarter on an annual basis. GNP for the year averages 2.2 percent.
 - Inflation is up to 4.9 percent annually.
- o Although CY 1989 likely will see slower growth, the U. S. should AVOID FALLING INTO RECESSION as:
 - Capital spending continues strong;
 - Domestic goods are substituted for now higher priced foreign items;
 - A backlog of orders needs to be worked off;
 - The dollar sinks a little further, benefiting exports.
- o The economy will be "catching its breath" in CY 1989, similar to the pause that happened in 1966-1967, during the prosperous 1961-1970 period.
- o By mid CY 1990, growth will pick up in a number of sectors as monetary policy has become more accommodative.
 - GNP will average 2.0 percent because of the slow first half year.
 - Inflation will average 4.9 percent, but should be subsiding after mid-year.
- o As a result of the slowdown, unemployment will edge up to 5.8 percent nationally in CY 1989 and 6.2 percent in CY 1990.
- o By CY 1991, the economy should be gathering steam with the average GNP rate up to 3.0 percent and unemployment averaging 5.7 percent.
- o The dollar should still see a gradual weakening during the forecast period. This will benefit exports,

but won't be giving the economy the boost it did in 1986-1988.

- o Taxes likely will have to be increased during the forecast period because of the deficit, regardless of campaign promises. The tax increases will be called "user fees."
- o Monetary policy has just switched from accommodative to restrictive to

fight inflation, but should move to a less restrictive stance about a year from now.

- o Oil prices should remain stable within the range of \$15 to \$17 per barrel.
- o The drought will cause higher food prices into next year.

ECONOMIC OUTLOOK - VIRGINIA

1989, 1990, and 1991 Virginia Forecast Highlights

- o Building on the strong CY 1988 base, Virginia should go into CY 1989 in very good shape. The uncertainties of a new administration in Washington, an expected slowing of the U. S. economy, and increased inflationary pressures should have only minimal impact on Virginia.
- o While employment growth here will likely be below the torrid 4 percent gains of recent years, nonagricultural employment is expected to grow at a 2.2 percent rate in both CY 1989 and CY 1990.
- o With further declines in the dollar, new facilities coming on line, and increased productivities brought about by new technologies, Virginia factories may actually increase their payrolls a little faster in CY 1989 than in CY 1988.
- o It is the nonmanufacturing industries which are likely to see some retrenchment from the boom growth levels of CY 1986, 1987, and 1988. Service and trade payrolls are only expected to increase employment by about 3 percent in CY 1989 and CY 1990, and the higher interest rates likely will reduce construction jobs by about 1 percent.
- o By CY 1991, the State's economy should be picking up steam again with a 2.8 percent growth in nonfarm jobs. By then, manufacturers should be increasing payrolls at the annual rate of 2.6 percent, and trade and service expansions should be close to 4 percent.
- o By mid-CY 1989, Virginia's unemployment rate will likely begin to inch up from the current low levels, not so much as the result of significant layoffs, but because the labor force will be growing slightly faster than the slowed rate of job creation. Joblessness is expected to edge up to 4.0 percent in CY 1989 and 4.6 percent in both CY 1990 and CY 1991. By mid-CY 1991, unemployment will likely again be receding.
- o The projected slightly higher jobless rates should still be lower than those recorded in 13 of the last 15 years and may help ease the labor shortage situations currently existing in several Virginia job markets.
- o The first half of the next decade should see a period of stable employment with low jobless rates.

William F. Mezger

HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS THIRD QUARTER 1988

o During Third Quarter 1988, four Virginia economic indicator series set all-time records.

- Nonagricultural wage and salary employment was once again the best performing indicator series, setting records each month of the quarter and rising to an all-time high of 2,808,900 jobs in September. This was an impressive 4.5 percent increase in the number of jobs from September to September.

- Although growing at a slower pace than in 1987, weekly earnings of Virginia production workers set records of \$387.56 in July and \$388.16 in September.

- Confidence in the State's economy was exhibited by an all-time record 1,817 new business incorporations in August.

- The very hot summer caused new electric power sales records to be set of 4,073.0 million kilowatt hours in July and 4,250.5 million kilowatt hours in August. While not quite as high as August, September's figure of 4,085.7 million kilowatt hours was still at a healthy level.

o In addition to the above, building permits issued climbed to \$235.3 million in September, a level second only to the record \$239.2 million set in December 1986. High building permit levels throughout the third quarter should keep construction contractors busy in 1989 and into 1990.

o According to the Bureau of Labor Statistics of the U. S. Department of Labor, productivity increased at a 1.5 percent annual rate during Third Quarter 1988 in the business sector. Output rose 2.6 percent and hours of all persons engaged in the sector

increased 1.1 percent (seasonally adjusted annual rates). Compared with Third Quarter 1987, productivity increased 0.5 percent, as output increased 4.0 percent and hours of all persons increased 3.5 percent.

o The U. S. Bureau of Labor Statistics also reported multifactor productivity measures--output per unit of combined labor and capital--for 1987. Multifactor productivity increased from 1986 to 1987 at the following rates:

0.8 percent in private business,
0.8 percent in private nonfarm
business, and
3.4 percent in manufacturing

The increase in multifactor productivity in the private business sector was the fifth consecutive increase, but the smallest since 1982. The rise in private nonfarm business productivity also was the fifth consecutive increase, but was smaller than the 1986 increase. The growth in manufacturing multifactor productivity was larger than the growth in 1986 and also the fifth consecutive increase.

o The CPI for All Urban Consumers averaged 119.1 (1982-4=100) in Third Quarter 1988. This was 1.4 percent above the 117.5 average for Second Quarter 1988. The Third Quarter 1988 average was 4.1 percent higher than the Third Quarter 1987 average. This was almost identical to the 4.2 percent third quarter to third quarter rise between 1986 and 1987.

o Coal production through the first nine months of 1988 at 35,406,000 short tons was 10.0 percent greater than during the similar 1987 period. So far in 1988, Virginia has the second best increase in coal production of any state east of the Mississippi.

VIRGINIA INDICATORS THIRD QUARTER DATA

Third Quarter Performance Lacks Luster

Third Quarter 1988 was the seventh quarter in a row of "ho-hum" performance by the indicators series. Once more the indicators exhibited a relatively narrow range of movement around recently established highs. Much of the movement that did take place this quarter was caused by the seasonal adjustment factors. Presidential election years are usually noted for "wait and see" economies that have plateaued at relatively high levels, and that proved to be the case in the third quarter. A dull election campaign coupled with the very hot summer, which kept many shoppers at home, seemed to be responsible for the lack of direction in the economy. Nonfarm employment was the only series that was still surging ahead with the creation of approximately 120,000 jobs for Virginia workers since Third Quarter 1987--an impressive gain of 4.4 percent.

Even with the inactivity exhibited by most series, four indicators did break new ground this quarter. The hot performing nonfarm employment series, mentioned above, broke records all three months, finishing the quarter at 2,808,900 jobs. Although not advancing as rapidly as in 1987, average weekly earnings of production workers did reach new highs of \$387.56 in July and \$388.16 in September. Confidence in the economy remained strong as new business incorporations soared to a record 1,817 in August. The hot summer provided record power sales figures of 4,073.0 million kilowatt hours in July and 4,250.5 million kilowatt hours in August. Also, September building permits at \$235.3 million were second only to the \$239.2 million December 1986 level.

As had been the case recently, the first month of the quarter proved to be the strongest and the second month turned in the poorest performance. In July, ten series were up, one was unchanged, and four were down. August saw only six series up, one unchanged, and eight down. September showed improvement with nine series up and six down.

The six-month moving average of rising indicators (page 12) serves to illustrate the quarter's performance. The moving average enhances analysis because it smooths out much of the irregularity present in many of the individual series.

Still Four Series Set Records

Nonagricultural wage and salary employment continued to be the strongest indicator series, setting records each month of the quarter and rising to an all-time high of 2,808,900 jobs in September. Nonfarm employment's September level was an impressive 4.5 percent higher than September 1987, indicating the Virginia economy is still creating new jobs at a rapid pace.

Factory employment trended downward each month of the quarter, reflecting mainly weaknesses that have recently surfaced in fashion denims and knit textiles.

The four unemployment related series were overly positive at the beginning (July) and end of the quarter (September), but turned negative in August due to temporary needle trade layoffs. The total unemployment rate on a seasonally adjusted basis shot up to

4.1 percent in September, largely because the timing of the unemployment survey reference week was coinciding with this year's much later than usual school and college opening dates, which produced a large number of students temporarily seeking after-school jobs. First-time claims for unemployment insurance showed improvement throughout the third quarter. Insured unemployment, which is the jobless rate among experienced workers, was unchanged from June through August at 1.0 percent, then fell to 0.9 percent in September. Unemployment insurance final payments were higher in August, reflecting exhaustions from textile and mine layoffs that occurred last spring.

The four factory production worker hours and earnings series were basically positive each month except August which was influenced by a slightly shorter workweek. Still, Virginia production workers averaged at least one hour of overtime each month of the quarter. While weekly earnings managed to set new all-time record highs in both July (\$387.56) and September (\$388.16), earnings have grown more slowly in 1988 than in 1987.

The business indicators were slightly positive in July and August before turning slightly negative in September. New business incorporations fell 28 percent in July, climbed 44 percent to an all-time high of 1,817 in August, then trailed off to 1,724 in September. Valuations of building permits issued increased 17 percent to \$225.2 million in July, fell to \$174.5 million in August, then surged to \$235.3 million in September, an amount second only to the \$239.2 million record of December 1986. These high building permit levels should foretell of continued strong construction activity in 1989 and 1990.

New vehicle registrations were off in July, picked up in August as dealers cleared out leftover 1988 models, then were off again in September. The very hot summer produced record power sales in both July (4,073.0 million kilowatt hours) and August (4,250.5 million kilowatt hours), before settling to a still high 4,085.7 million kilowatt hours in September. Taxable retail sales rose in July, fell in August because of the hot weather and later school openings keeping shoppers home, then increased again in September.

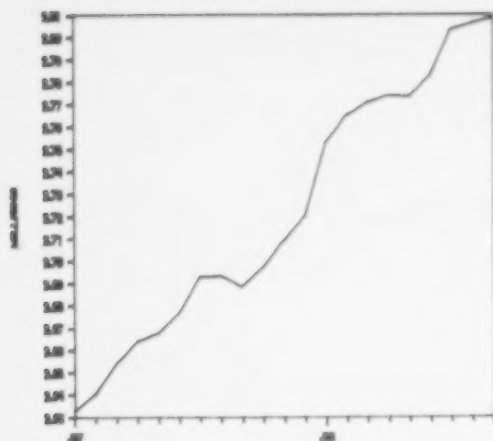
William F. Mezger

EMPLOYMENT AND UNEMPLOYMENT INDICATORS
January 1987 to September 1988

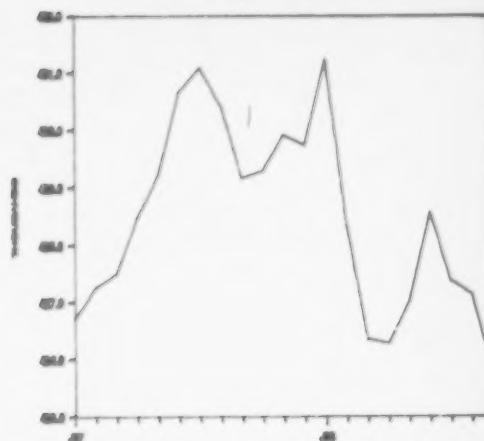
	Nonag Wage & Salary Employment (Thous)		Manufacturing Employment * (Thousands)		Total Unemployment Rate (Percent)	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
January, 1987	2,588.4	2,633.2	423.3	426.7	4.8	4.3
February	2,588.0	2,640.8	424.7	427.3	4.8	4.4
March	2,622.3	2,654.1	425.8	427.5	4.6	4.4
April	2,653.5	2,664.2	427.2	428.5	4.2	4.3
May	2,681.3	2,668.0	427.5	429.2	4.1	4.2
June	2,711.8	2,677.0	431.1	430.7	4.3	4.3
July	2,695.9	2,693.2	429.8	431.1	4.1	4.1
August	2,693.7	2,693.7	431.3	430.4	3.9	4.1
September	2,704.8	2,688.7	432.6	429.2	3.9	4.2
October	2,718.9	2,697.3	432.3	429.3	3.9	4.1
November	2,733.7	2,709.3	432.5	429.9	4.0	4.1
December	2,744.7	2,720.2	430.6	429.7	4.0	4.1
January, 1988	2,706.2	2,753.0	427.8	431.3	4.2	3.8
February	2,709.9	2,765.2	426.2	428.3	4.1	3.7
March	2,737.8	2,771.1	423.8	426.4	3.8	3.6
April	2,763.1	2,774.2	425.0	426.3	3.5	3.6
May	2,787.5	2,773.6	425.3	427.0	3.6	3.7
June	2,816.4	2,783.0	429.0	428.6	3.8	3.8
July	2,806.4	2,803.6	426.1	427.4	3.7	3.7
August	2,806.5	2,806.5	428.0	427.1	3.6	3.8
September	2,822.9	2,808.9	429.2	425.8	3.8	4.1
	Average Weekly Initials Claims		Avg. Wkly. Insured Unemployment Rate (%)		U. I. Final Payments	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
January, 1987	9,593	6,153	1.3	0.8	1,970	1,885
February	7,054	6,237	1.3	1.0	1,849	1,922
March	4,828	5,549	1.1	0.9	2,327	1,991
April	4,484	5,263	0.9	0.9	2,561	1,828
May	3,519	5,093	0.8	0.9	1,917	1,661
June	4,810	5,561	0.9	1.1	2,268	2,257
July	5,192	5,115	0.7	0.8	1,834	1,703
August	3,530	4,979	0.7	0.9	1,639	1,827
September	3,478	5,326	0.7	0.9	1,454	1,800
October	3,535	4,751	0.6	0.8	1,288	1,626
November	5,329	5,511	0.7	0.8	1,177	1,653
December	11,354	5,814	1.1	1.0	1,510	1,640
January, 1988	11,715	7,558	1.5	1.0	1,655	1,576
February	7,323	6,435	1.3	1.0	1,938	2,012
March	6,252	7,236	1.1	0.9	2,442	2,098
April	4,901	5,759	0.9	0.9	2,157	1,476
May	4,470	6,507	0.8	0.9	1,945	1,685
June	5,521	6,375	0.8	1.0	1,964	1,960
July	6,361	6,249	0.9	1.0	1,868	1,728
August	3,951	5,557	0.8	1.0	1,917	2,147
September	3,525	5,390	0.7	0.9	1,437	1,772

* These series have been adjusted to First Quarter 1987 benchmarks.

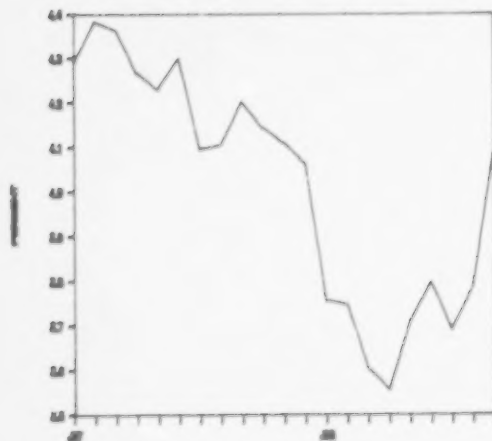
NONAG W & S EMPLOYMENT



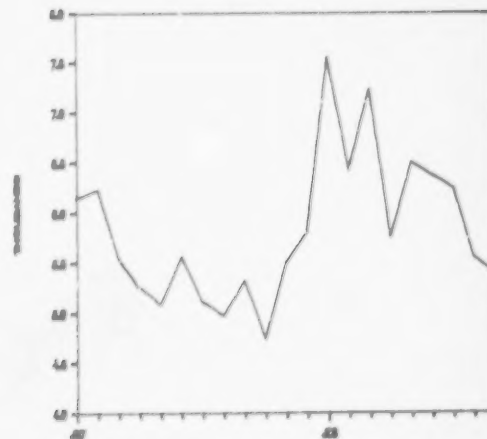
MANUFACTURING EMPLOYMENT



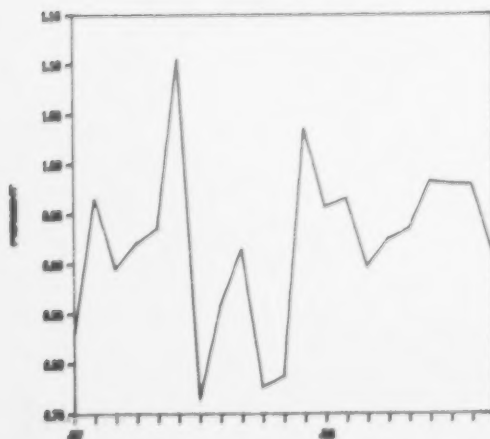
TOTAL UNEMPLOYMENT RATE



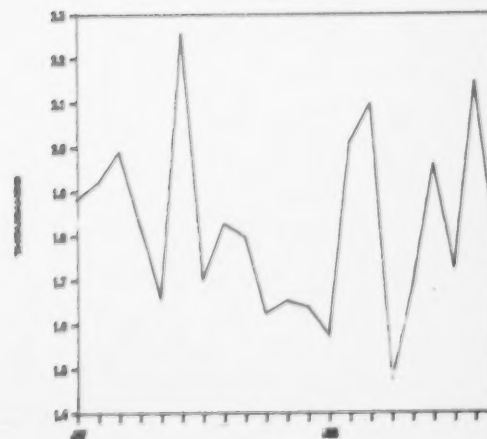
AVG. WEEKLY INITIAL CLAIMS



INSURED UNEMPLOYMENT RATE



U.I. FINAL PAYMENTS



MANUFACTURING PRODUCTION WORKER INDICATORS

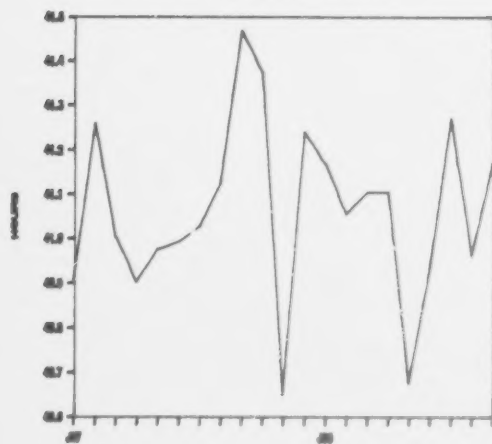
January 1987 to September 1988

	Average Weekly Hours*		Average Manhours* (Thousands)	
	Unadj.	Adj.	Unadj.	Adj.
January, 1987	40.5	40.9	13,020.2	13,231.9
February	40.6	41.3	13,052.4	13,305.2
March	40.8	41.0	13,171.5	13,318.0
April	40.7	40.9	13,174.9	13,308.0
May	41.1	41.0	13,334.9	13,375.0
June	41.2	41.0	13,515.3	13,421.4
July	40.7	41.0	13,312.7	13,474.4
August	41.0	41.1	13,460.9	13,501.4
September	41.8	41.5	13,793.1	13,575.9
October	41.5	41.4	13,676.6	13,554.6
November	41.1	40.7	13,561.5	13,308.6
December	41.9	41.2	13,731.4	13,462.2
January, 1988	40.8	41.2	13,281.5	13,483.8
February	40.4	41.1	13,083.6	13,323.4
March	40.9	41.1	13,164.7	13,311.1
April	40.9	41.1	13,208.2	13,341.6
May	40.8	40.7	13,185.3	13,225.0
June	41.1	40.9	13,391.4	13,298.3
July	40.9	41.3	13,237.3	13,398.1
August	40.8	41.0	13,288.5	13,328.5
September	41.5	41.2	13,587.4	13,373.4

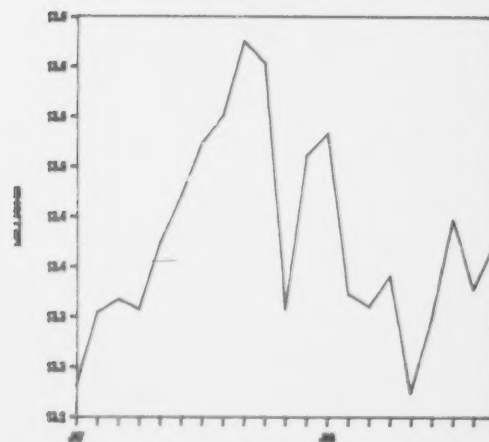
	Average Hourly Earnings*(Dollars)		Average Weekly Earnings*(Dollars)	
	Unadj.	Adj.	Unadj.	Adj.
January, 1987	9.05	9.00	366.53	367.63
February	9.07	9.03	368.24	373.09
March	9.07	9.06	370.06	371.92
April	9.04	9.06	367.93	370.15
May	9.03	9.07	371.13	371.87
June	9.16	9.19	377.39	375.89
July	9.16	9.16	372.81	375.82
August	9.14	9.17	374.74	376.62
September	9.30	9.30	388.74	386.81
October	9.22	9.25	382.63	383.40
November	9.27	9.27	381.00	376.48
December	9.31	9.27	390.09	382.44
January, 1988	9.30	9.26	379.44	380.58
February	9.31	9.27	376.12	381.07
March	9.38	9.37	383.64	385.57
April	9.38	9.40	383.64	385.96
May	9.41	9.46	383.93	384.31
June	9.37	9.40	385.11	383.58
July	9.40	9.39	384.46	387.56
August	9.42	9.45	384.34	386.27
September	9.40	9.40	390.10	388.16

* These series have been adjusted to First Quarter 1987 benchmarks.

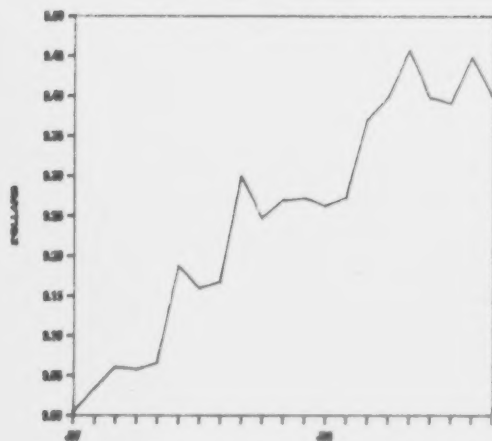
AVERAGE WEEKLY HOURS



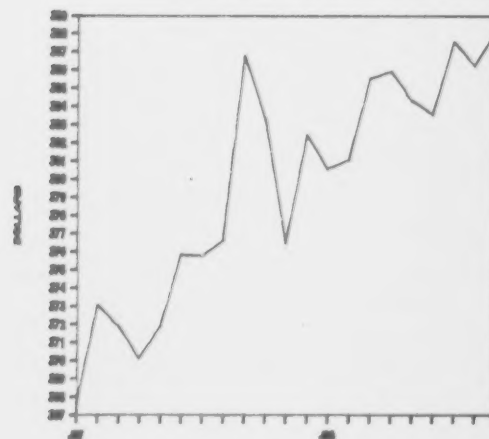
AVERAGE MANHOURS



AVERAGE HOURLY EARNINGS



AVERAGE WEEKLY EARNINGS

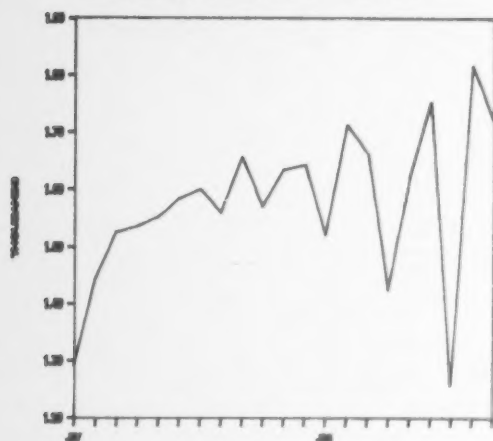


BUSINESS INDICATORS
January 1987 to September 1988

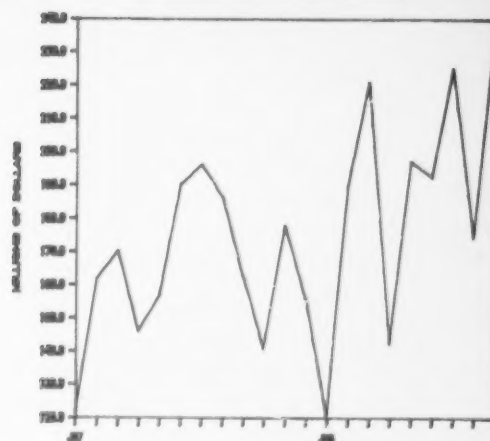
	New Business Incorporations		Valuation of Building Permits (\$ Millions)		New Vehicle Registrations	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
January, 1987	1,237	1,293	111.8	122.2	41,798	41,840
February	1,453	1,444	123.4	161.9	28,975	34,169
March	1,707	1,527	195.0	170.3	41,798	39,960
April	1,694	1,537	157.4	146.1	43,113	40,105
May	1,582	1,554	165.1	156.6	39,956	36,192
June	1,584	1,586	258.0	190.3	47,997	41,882
July	1,624	1,602	190.1	196.2	46,707	41,965
August	1,541	1,561	185.2	186.7	41,958	40,855
September	1,519	1,656	148.5	163.0	42,661	38,712
October	1,593	1,573	148.5	141.0	36,593	36,159
November	1,436	1,636	171.4	178.0	31,180	38,494
December	1,638	1,645	127.8	156.2	29,350	40,764
January, 1988	1,451	1,523	110.8	120.4	32,226	32,098
February	1,724	1,714	144.9	189.9	35,797	42,313
March	1,861	1,665	252.9	221.1	42,684	41,003
April	1,573	1,426	153.2	142.4	40,207	37,472
May	1,650	1,622	209.4	197.2	41,767	37,798
June	1,749	1,754	261.2	192.6	42,562	37,237
July	1,280	1,259	215.1	225.2	40,127	36,053
August	1,790	1,817	172.4	174.5	42,282	41,291
September	1,581	1,724	215.1	235.3	39,684	35,816

	Electrical Power Sales (Mil. of KWH)		Taxable Retail Sales (\$ Millions)	
	Unadj.	Adj.	Unadj.	Adj.
January, 1987	4,142.9	3,571.5	2,388.1	2,767.2
February	4,221.3	3,769.0	3,569.4	3,926.7
March	3,879.1	3,777.1	2,985.7	3,152.8
April	3,381.9	3,741.0	3,109.4	3,242.3
May	3,177.8	3,787.6	3,472.1	3,220.9
June	3,756.6	3,884.8	3,579.4	3,488.7
July	4,237.3	3,938.0	3,352.7	3,376.3
August	4,511.6	4,024.6	3,082.5	2,897.1
September	3,972.2	3,856.5	3,658.5	3,729.4
October	3,396.8	3,855.6	3,123.3	3,226.5
November	3,326.4	3,827.8	3,583.5	3,396.7
December	3,929.5	3,910.0	3,861.0	3,360.3
January, 1988	4,709.7	4,067.1	3,781.8	4,397.4
February	4,448.0	3,967.9	3,501.8	3,843.9
March	4,008.3	3,895.3	2,935.0	3,092.7
April	3,518.9	3,901.2	2,934.9	3,063.6
May	3,251.7	3,875.7	3,570.8	3,312.4
June	3,704.3	3,822.8	3,541.0	3,444.6
July	4,382.5	4,073.0	4,034.6	4,075.4
August	4,764.8	4,250.5	3,550.4	3,321.2
September	4,200.1	4,085.7	3,705.1	3,784.6

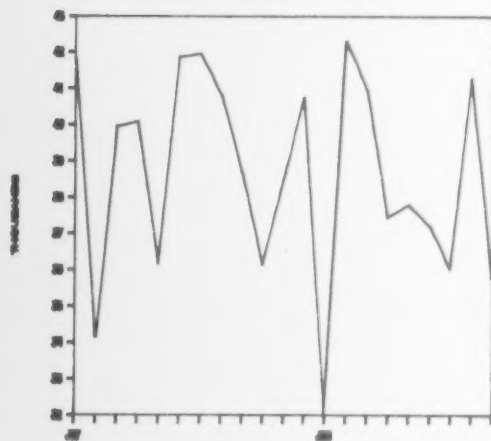
NEW BUSINESS INCORPORATIONS



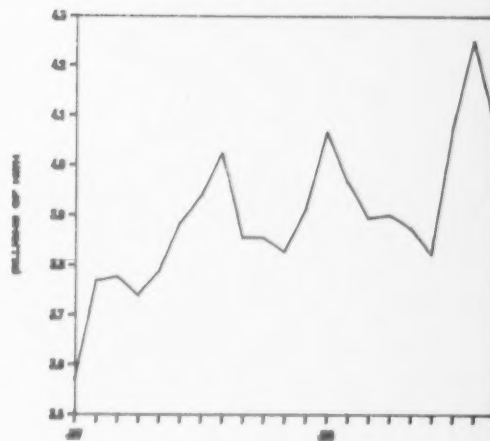
VALUATION OF BUILDING PERMITS



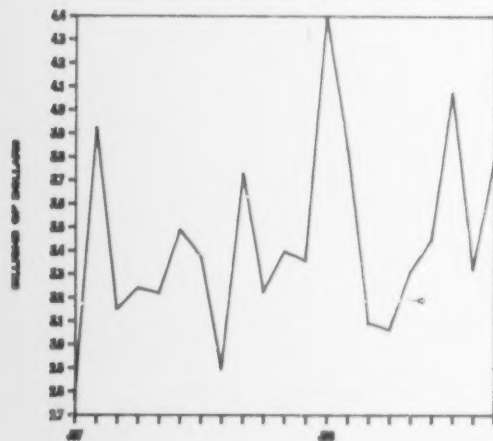
NEW VEHICLE REGISTRATIONS



ELECTRICAL POWER SALES



TAXABLE RETAIL SALES



DATA SUMMARY

SEPTEMBER 1988

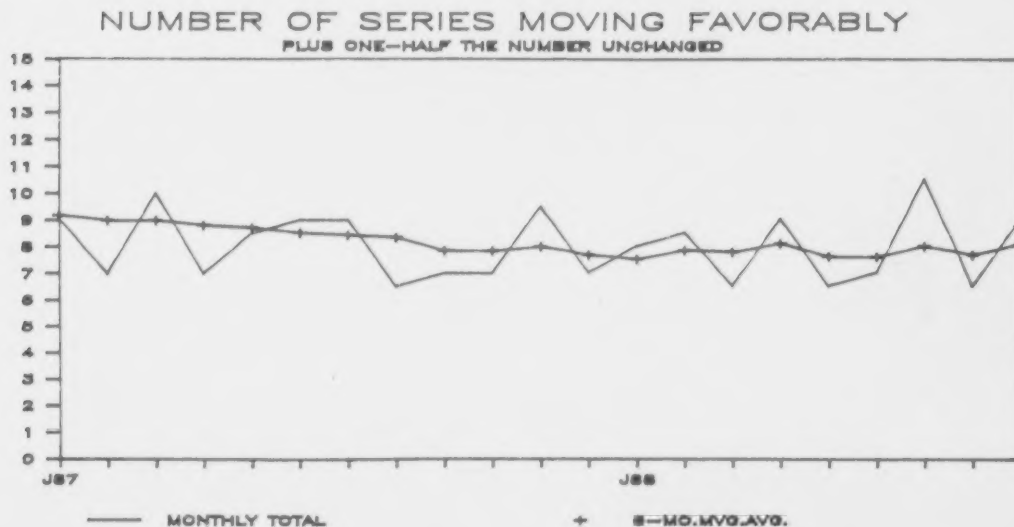
(SEASONALLY ADJUSTED DATA)

				Percent & (Direction**) of Change	
DATA SUMMARY	Sep.	Aug.	Sep.	Aug. '88-	Sep. '87-
SEPTEMBER 1988	1988	1988	1987	Sep. '88	Sep. '88
(SEASONALLY ADJUSTED DATA)					
EMPLOYMENT					
*Nonagricultural Wage & Salary Employment (000)	2,808.9	2,806.5	2,688.7	0.1 (+)	4.5 (+)
*Manufacturing Employment (000)	425.8	427.1	429.2	-0.3 (-)	-0.8 (-)
UNEMPLOYMENT					
*Total Unemployment Rate (%)	4.1	3.8	4.2	(-)	(+)
Average Weekly Initial Claims	5,390	5,557	5,326	-3.0 (+)	1.2 (-)
Average Weekly Insured Unemployment Rate (%)	0.9	1.0	0.9	(+)	(0)
Unemployment Insurance Final Payments	1,772	2,147	1,800	-17.5 (+)	-1.6 (+)
MANUFACTURING PRODUCTION WORKERS					
*Average Weekly Hours	41.2	41.0	41.5	0.5 (+)	-0.7 (-)
*Average Manhours (000)	13,373.4	13,328.5	13,575.9	0.3 (+)	-1.5 (-)
*Average Hourly Earnings (\$)	9.40	9.45	9.30	-0.5 (-)	1.1 (+)
*Average Weekly Earnings (\$)	388.16	386.27	386.81	0.5 (+)	0.3 (+)
BUSINESS					
New Business Incorporations	1,724	1,817	1,656	-5.1 (-)	4.1 (+)
Valuation of Building Permits -18 Cities (\$M)	235.3	174.5	163.0	34.8 (+)	44.4 (+)
New Vehicle Registrations	35,816	41,291	38,712	-13.3 (-)	-7.5 (-)
Electrical Power Sales (M of KWH)	4,085.7	4,250.5	3,856.5	-3.9 (-)	5.9 (+)
Taxable Retail Sales (\$M)	3,784.6	3,321.2	3,729.4	14.0 (+)	1.5 (+)

* Revised to First Quarter 1987 benchmarks

** + = Favorable, - = Not Favorable, 0 = No Change (less than .05%)

SUMMARY



DATA SUMMARY

AUGUST 1988

(SEASONALLY ADJUSTED DATA)

EMPLOYMENT

	Aug. 1988	Jul. 1988	Aug. 1987	Percent & (Direction**) of Change Jul. '88- Aug. '88	Aug. '87- Aug. '88
*Nonagricultural Wage & Salary Employment (000)	2,806.5	2,803.6	2,693.7	0.1 (+)	4.2 (+)
*Manufacturing Employment (000)	427.1	427.4	430.4	-0.1 (-)	-0.8 (-)

UNEMPLOYMENT

*Total Unemployment Rate (%)	3.8	3.7	4.1	(-)	(+)
Average Weekly Initial Claims	5,557	6,249	4,979	-11.1 (+)	11.6 (-)
Average Weekly Insured Unemployment Rate (%)	1.0	1.0	0.9	(0)	(-)
Unemployment Insurance Final Payments	2,147	1,728	1,827	24.2 (-)	17.5 (-)

MANUFACTURING PRODUCTION WORKERS

*Average Weekly Hours	41.0	41.3	41.1	-0.7 (-)	-0.2 (-)
*Average Manhours (000)	13,328.5	13,398.1	13,501.4	-0.5 (-)	-1.3 (-)
*Average Hourly Earnings (\$)	9.45	9.39	9.17	0.6 (+)	3.1 (+)
*Average Weekly Earnings (\$)	386.27	387.56	376.62	-0.3 (-)	2.6 (+)

BUSINESS

New Business Incorporations	1,817	1,259	1,561	44.3 (+)	16.4 (+)
Valuation of Building Permits -18 Cities (\$M)	174.5	225.2	186.7	-22.5 (-)	-6.5 (-)
New Vehicle Registrations	41,291	36,053	40,855	14.5 (+)	1.1 (+)
Electrical Power Sales (M of KWH)	4,250.5	4,073.0	4,024.6	4.4 (+)	5.6 (+)
Taxable Retail Sales (\$M)	3,321.2	4,075.4	2,897.1	-18.5 (-)	14.6 (+)

DATA SUMMARY

JULY 1988

(SEASONALLY ADJUSTED DATA)

EMPLOYMENT

	Jul. 1988	Jun. 1988	Jul. 1987	Percent & (Direction**) of Change Jun. '88- Jul. '88	Jul. '87- Jul. '88
*Nonagricultural Wage & Salary Employment (000)	2,803.6	2,783.0	2,693.2	0.7 (+)	4.1 (+)
*Manufacturing Employment (000)	427.4	428.6	431.1	-0.3 (-)	-0.9 (-)

UNEMPLOYMENT

*Total Unemployment Rate (%)	3.7	3.8	4.1	(+)	(+)
Average Weekly Initial Claims	6,249	6,375	5,115	-2.0 (+)	22.2 (-)
Average Weekly Insured Unemployment Rate (%)	1.0	1.0	0.8	(0)	(-)
Unemployment Insurance Final Payments	1,728	1,960	1,703	-11.8 (+)	1.5 (-)

MANUFACTURING PRODUCTION WORKERS

*Average Weekly Hours	41.3	40.9	41.0	1.0 (+)	0.7 (+)
*Average Manhours (000)	13,398.1	13,298.3	13,474.4	0.8 (+)	-0.6 (-)
*Average Hourly Earnings (\$)	9.39	9.40	9.16	-0.1 (-)	2.5 (+)
*Average Weekly Earnings (\$)	387.56	383.58	375.82	1.0 (+)	3.1 (+)

BUSINESS

New Business Incorporations	1,259	1,754	1,602	-28.2 (-)	-21.4 (-)
Valuation of Building Permits -18 Cities (\$M)	225.2	192.6	196.2	16.9 (+)	14.8 (+)
New Vehicle Registrations	36,053	37,237	41,965	-3.2 (-)	-14.1 (-)
Electrical Power Sales (M of KWH)	4,073.0	3,822.8	3,938.0	6.5 (+)	3.4 (+)
Taxable Retail Sales (\$M)	4,075.4	3,444.6	3,376.3	18.3 (+)	20.7 (+)

* Revised to First Quarter 1987 benchmarks

** + = Favorable, - = Not Favorable, 0 = No Change (less than .05%)

THE VIRGINIA LEADING AND COINCIDENT INDEXES

Month	Leading Index (1977=100)	Monthly Percent Change	Quarterly Percent Change	Coincident Index (1977=100)	Monthly Percent Change	Quarterly Percent Change
January, 1987	158.5	-0.5		139.0	+0.2	
February	158.9	+0.2	+0.7	141.1	+1.5	+1.4
March	160.3	+0.9		141.7	+0.4	
April	161.0	+0.4		142.5	+0.6	
May	162.6	+1.0	+1.7	142.5	0.0	+1.8
June	162.4	-0.2		144.3	+1.3	
July	164.3	+1.2		145.8	+1.0	
August	165.3	+0.6	+2.1	143.5	-1.6	+1.0
September	166.6	+0.8		144.2	+0.5	
October	167.5	+0.5		144.0	-0.1	
November	168.3	+0.5	+1.6	144.8	+0.6	+0.1
December	168.1	-0.1		145.2	+0.3	
January, 1988	166.3	-1.1		149.7	+3.1	
February	166.5	+0.1	-0.8	153.2	+2.3	+4.8
March	167.0	+0.3		151.9	-0.9	
April	167.9	+0.5		152.2	+0.2	
May	167.2	-0.4	+0.9	153.2	+0.7	+1.3
June	169.0	+1.1		155.2	+1.3	
July	171.1	+1.2		153.5	-1.1	
August	171.2	+0.1	+2.1	152.6	-0.6	+0.3
September	172.5	+0.8		156.0	+2.2	

Leading Index Components: Average Weekly Hours for Production Workers, 5-month moving average; New Businesses, 6-month moving average; Building Permits, deflated to 1982 dollars, 6-month moving average; Average Weekly Initial Claims, 3-month moving average. Coincident Index Components: Personal Income Less Transfer Payments, deflated to 1982 dollars; Industrial Production Index; Nonagricultural Wage and Salary Employment; Taxable Retail Sales, deflated to 1967 dollars by the Consumer Price Index, 6-month moving average.

Sources include The WEFA Group for Industrial Production Index and most recent quarter Personal Income, and the U.S. Department of Commerce for Personal Income. All components seasonally adjusted.

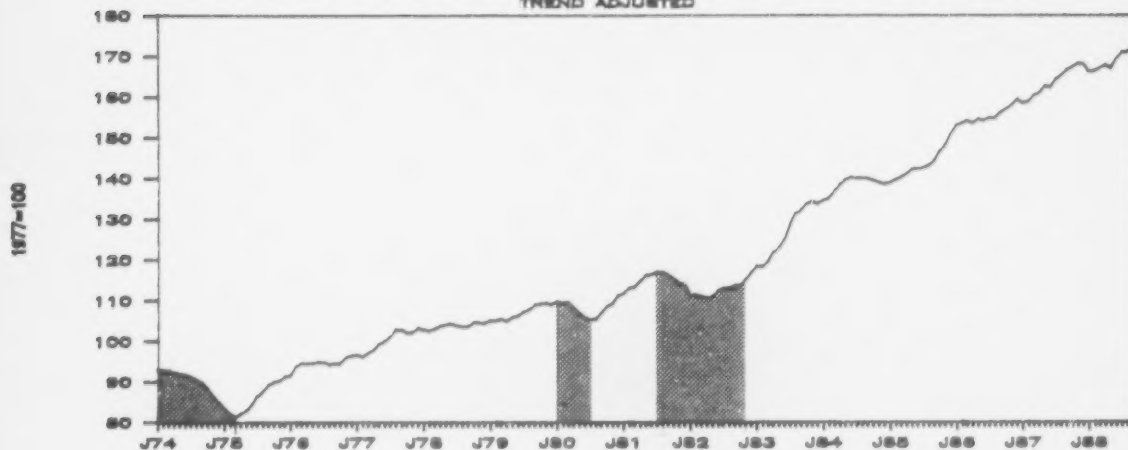
The sharp rise in the State's leading index was due to strong showings in all of its components including very high valuation of building permits for July and September. The coincident index continued its quarterly increases with a strong September rise offsetting losses in July and August.

Quarter	Total Personal Income Millions	Transfer Payments Millions	Real Personal Income (\$82) Millions	Transfer Payments (\$82) Millions
1st Qtr, 1987	\$92,749	\$12,160	\$79,403	\$10,417
2nd Qtr	93,690	12,370	79,130	10,475
3rd Qtr	96,060	12,410	80,350	10,419
4th Qtr	99,510	12,550	81,900	10,329
1st Qtr, 1988	101,190	13,060	82,800	10,686
2nd Qtr	102,170	13,310	82,530	10,751
3rd Qtr	103,790	13,470	83,010	10,772

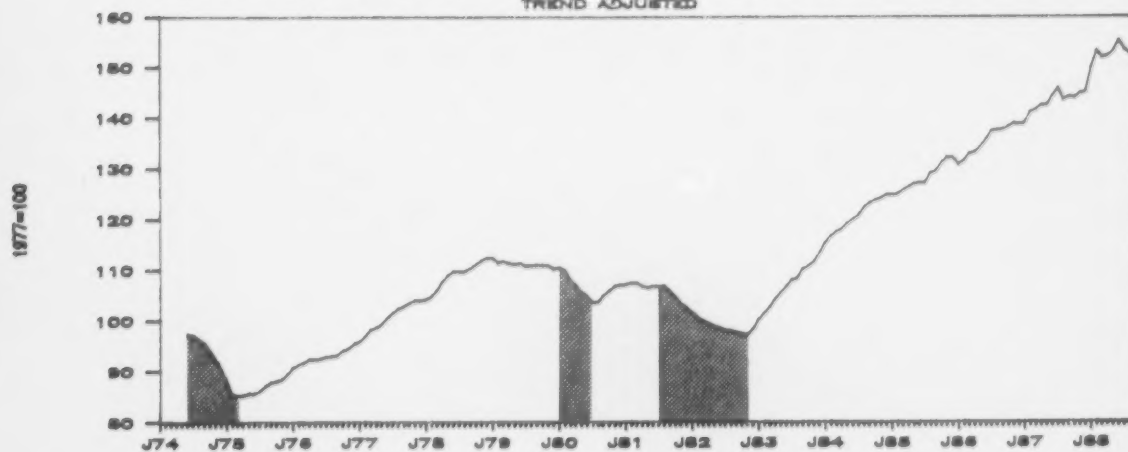
Notes: All personal income data reflects seasonally adjusted annual rates.

Sources include The WEFA Group and the Bureau of Economic Analysis, U.S. Department of Commerce.

VIRGINIA INDEX OF LEADING INDICATORS TREND ADJUSTED



VIRGINIA INDEX OF COINCIDENT INDICATORS TREND ADJUSTED



IMPACT OF TECHNOLOGY IN VIRGINIA

In December 1988, the Virginia Employment Commission released the findings of its recently completed Impact of Technology in Virginia survey. The major findings of that survey are used as the feature article in this issue of the Economic Indicators. The published report, Impact of Technology in Virginia, is available from the Economic Information Services Division, P. O. Box 1358, Richmond, Virginia 23211, (804) 786-7496.

Overview

In the past decade new technologies have caused dynamic and profound changes in the Virginia work place. Jobs are growing more technical, demanding greater skills and specialization, and computers have become more important tools throughout the occupational spectrum.

In order to better assess the impact of changing technologies in Virginia, the Virginia Employment Commission (VEC) surveyed executives of leading Virginia firms in the industries where most technology is centered--manufacturing, communications, and research and development.

A questionnaire containing nine multiple choice questions was mailed to the top Virginia operating officers of target industry firms with over 150 employees based on 1985 unemployment insurance tax records. Only the larger firms were surveyed due to the high cost associated with surveying numerous small firms and the belief that the larger firms would be more likely to implement new and emerging technologies. The questionnaire dealt with the extent of current and future automation, anticipated areas of technological change, reasons for automating, the impact of the changes on employment and occupations, expected methods of recruitment of the skills to implement changes, and how reductions in force brought about by automation would be handled if required.

The questionnaires were mailed in June and July 1987. Follow-up continued through the fall and early winter 1987.

The Respondents

The survey sample covered 433 firms with over 306,000 employment. Better than two-thirds of all manufacturing employment was included in the sample. Of these, we received 225 usable questionnaires for a 52.0 percent usable response rate. Employment in firms completing the questionnaire was 66 percent of sample employment. Rates of return were high for a voluntary survey of this nature.

The respondents, as a sample of particular industries, varied significantly. The responding employers represented a high of 47.6 percent of the State's Non-durable Goods Manufacturing employment to 16.5 percent of the State's Research and Development (R & D) employment. The results in manufacturing should be representative of the industry. Communications and R & D results are indicative of attitudes in large firms only.

Firm executives filled out 55 percent of the responses; personnel administrators filled out 23 percent; financial personnel responded to 12 percent, and the remaining 10 percent were received from other branches of management.

Survey Results

Results are based on the most frequent response or an average of the most frequent responses except as noted. For those categories in which respondents were required to rank different choices, the most frequent replies were used as a basis with the choices then being ranked. Employers were asked to evaluate the current state of technology in three key areas (1) Plant/Process, (2) Office/Clerical, and (3) Inventory Control/Shipping, and to assess how they felt technology would be implemented in these areas by 1995. At the time of the survey in late 1987, overall respondents were considerably more automated in the Office/Clerical area (25-50 percent) than in the other two categories. Employers have taken advantage of the wide variety of word processing and other automated office equipment to reduce operating costs. The office function apparently was easiest to automate. Relatively little progress had been made in either Plant/Process or Inventory Control/Shipping (both less than 25 percent automated). Some manufacturers seemed to be slow to add plant automation because of the specialized or custom nature of their work. Communications firms have outpaced other industries with 50-75 percent automation of Plant/Process and Inventory Control/Shipping.

Most survey respondents expected to considerably increase automation by 1995. Employers expected the biggest strides to come in the automation of Inventory Control/Shipping. Almost 35 percent of the responding firms expected to have this function over 75 percent automated by the end of the eight-year period. Almost two-thirds of the respondents expected to have inventories better than 50 percent automated. Significant advancement was also projected in the Plant/Process area with well over half the respondents expecting to be at least 50-75 percent automated by 1995. The Office/Clerical area, currently the most automated, is expected

to experience an increase in automation from the 25-50 percent range to the 50-75 percent range. R & D firms anticipate over 75 percent automation of Office/Clerical functions.

Firms were asked to rank the technologies they felt they would employ 1995. The composite choices for all industries were:

1. Robotics and other process controls
2. Automated planning and control systems
3. Automated inventory control
4. TIED: Telecommunications; and Office automation
6. Automated material handling
7. Automated product design

The fact that offices are already fairly highly automated may be the reason that office automation did not receive a higher priority. There seemed to be relatively little interest in automated material handling or automated product design. These rankings varied significantly between industries as office automation was ranked first by Communications and R & D firms, and robotics was ranked fifth by Communications respondents and last by R & D firms.

Cost cutting was overwhelmingly the major consideration when employers were asked about reasons for adopting new technologies. Over 46 percent of the respondents listed cost cutting as the major reason for adding technologies and 40 percent listed it as a second choice. The next reason cited was improving the product line, listed as first choice by 32 percent of the respondents and second choice by 38 percent. Keeping up with competition was ranked as the third consideration for adopting new technologies. The Communications firms, reflecting the fast pace of the industry, ranked keeping up with competition as the primary reason to adopt new technology.

The employers' responses for reasons that might prevent the adoption of new technologies were:

1. High cost of technology
2. Poor economic condition
3. TIED: Lack of ability to finance; and Lack of skills to implement
5. Do not wish to change

Cost consciousness was very important as over 47 percent listed high cost as the most important limiting factor and 28 percent listed it second. Poor economic conditions were listed as the major limiting factor by 29 percent of the respondents, and 30 percent more listed it second. Inability to finance and lack of skills to implement the technologies were of concern, but were of much less priority. A few employers stated they did not wish to change, but this was mainly where the product was of a custom or specialty nature. Lack of ability to finance was more important to Communications (first) and R & D (second) firms.

Employers were asked whether they thought automation would increase or decrease their total employment. The overall response was pessimistic with 61 percent seeing some decrease while 39 percent foresaw gains. The anticipated employment changes, however, were not severe with the majority of both positive and negative groups seeing overall changes of less than 25 percent. R & D firms were more optimistic with the majority of firms seeing an increase of up to 50 percent reflecting their recent experience of strong industry growth.

Employers were asked to look at the occupational categories where changes were expected to occur. The winners or growth occupations were:

Engineering (Increase 0-30 percent)
Data Processing (Increase 0-30 percent)

Those occupations in which employment

was not expected to be greatly affected overall by automation were:

Mathematics
Natural Science Skills
Administrative
Sales
Maintenance
Service

Occupations in which automation was expected to cause employment reduction were:

Clerical (Decrease 0-30 percent)
Production Workers
(Decrease 0-30 percent)

Employers see employment increases in occupations associated with implementing and operating automated facilities and see cost savings in the form of a reduced work force because of automation in offices and on the production line. R & D firms anticipate growth in nearly every occupational category. Communications firms saw not only increases in engineering, sales, data processing, and service occupations, but also losses in mathematics, natural science skills, administrative, clerical, and production workers. Non-durable Goods Manufacturing firms were optimistic with sales, maintenance, engineering, and data processing, expecting to see gains. Durable Goods Manufacturers anticipate an increase in clerical workers.

The survey looked at favored methods of work force reductions should that be necessary in the face of automation. Respondents as a whole were fairly passive in the means they would use to handle work force reductions. Favored methods were:

1. Attrition
2. In-house retraining
3. Transfers to other jobs/facilities
4. Outside retraining
5. Reduced hours
6. Job sharing
7. Layoffs

Attrition was the first choice of 65 percent of the respondents. In-house retraining was clearly the second most popular way to cope with the problem, being selected by 16 percent of respondents as first choice and by 36 percent as second choice. Distant third and fourth choices were outside retraining and transfers to other jobs/facilities. Reduced hours and job sharing did not find a lot of favor with most respondents. Communications firms were by far the least passive, favoring layoffs and transfers to other jobs/facilities as methods to reduce employment.

Employers' responses when asked to rate their favored means of acquiring the skills necessary to implement new technologies were:

1. In-house retraining of present employees
2. Outside retraining of present employees
3. Recruit people with needed skills from the labor market
4. Recruit from community colleges or technical schools

5. Recruit from 4-year colleges or graduate schools
6. Contract out for services

Respondents had a fairly benevolent attitude toward present personnel in keeping with methods of work force reduction, preferring to provide in-house retraining to people already on their payrolls (first choice of 54 percent of respondents). Outside retraining was the second choice of about a third of those responding. Next, employers seemed to prefer hiring people with the needed skills from the general labor market. Hiring from schools and training institutions were also choices listed with a slight preference for community colleges and technical schools over four-year colleges. Perhaps it was felt technical schools provided applicants at the desired skill levels at lower cost. There did not seem to be a great deal of interest in contracting out for needed technical services. Due to the highly technical nature of their work, R & D firms preferred to recruit workers to supplement new technologies from four-year colleges or graduate schools or from the labor market.

William F. Mezger

Special thanks is due the Virginia Manufacturers Association for their recommendations for improving the survey questionnaire and their unqualified endorsement of the project.



HISTORICAL SUMMARY

PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE

GENERAL INFORMATION

For those interested in studying the business cycle in Virginia, this publication includes several of the economic time series for which data is readily available on a monthly basis. From time to time, new series will be added and, if necessary, others presently included will be discontinued.

desirable to eliminate, insofar as possible, the effect of irrelevant factors from the data comprising the series. All series currently published in indicators have been adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle.

Business Cycle Turning Points

The shaded spaces on the charts represent the 1973-75, 1980, and 1981-82 recessions as designated by the National Bureau of Economic Research (NBER). The beginning of a recession is defined as the month when aggregate economic activity in the U. S. reaches a cyclical high, from which it begins to turn down, and the end as the month when it reaches a cyclical low, from which it begins to turn up. According to NBER, the 1973-75 recession began in November 1973 and ended in March 1975, the 1980 recession began in January 1980 and ended in July 1980, and the 1981-82 recession began in July 1981 and ended in November 1982.

Months for Cyclical Dominance (MCD)

After seasonal adjustment there often remains a significant degree of purely random change, the effect of which can be minimized with a moving average equal in length to the MCD of the series. The MCD is an estimate of the length of the moving average which will reveal the cyclical pattern among the welter of random fluctuations in the data--the greater the MCD the more random and less cyclically significant are monthly changes in the series. Where noted, charts of historical data in this publication represent seasonally adjusted figures which have been averaged according to the MCD of each series.

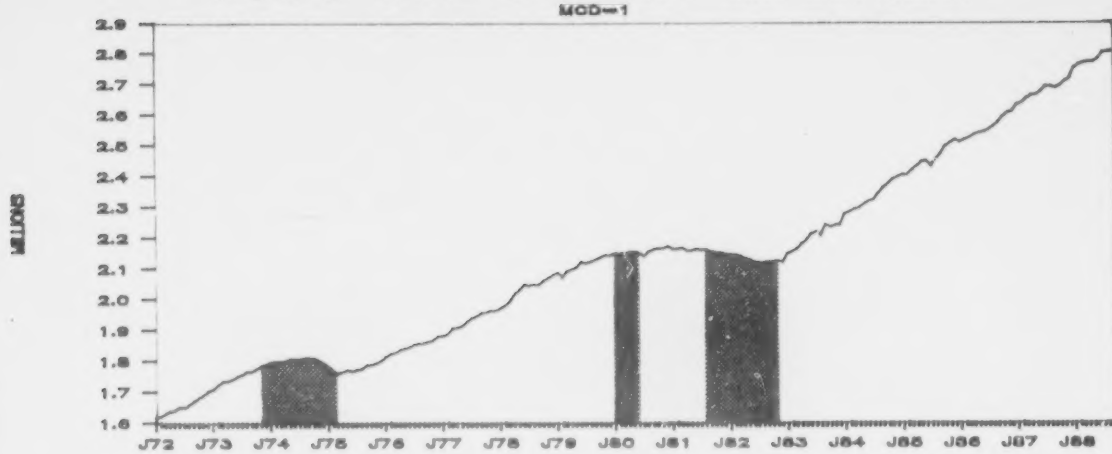
Seasonal Adjustment

To correlate changes in a time series and changes in the business cycle it is

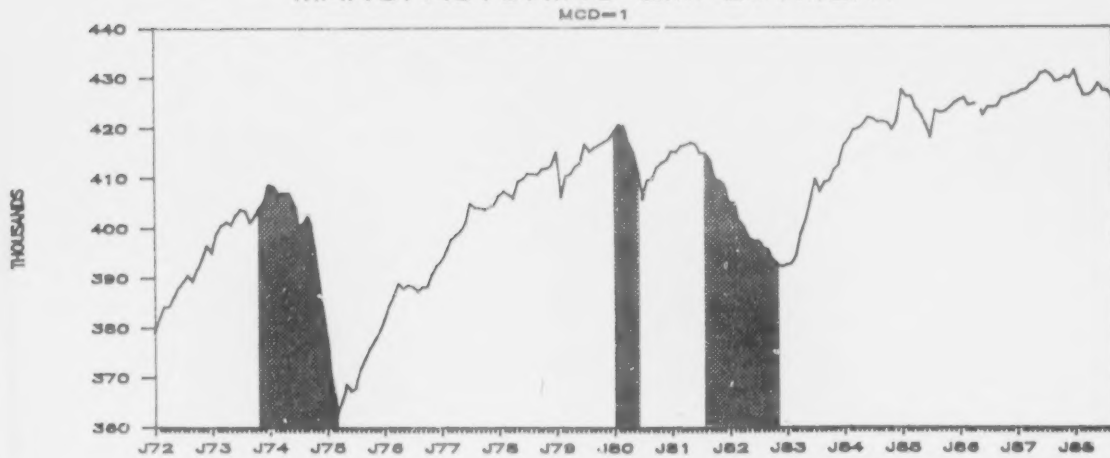
DATA SOURCES

Nonagricultural Wage and Salary Employment.....	Virginia Employment Commission (VEC)
Manufacturing Employment.....	VEC
Total Unemployment Rate.....	VEC
Average Weekly Initial Claims.....	VEC
Insured Unemployment Rate.....	VEC
Unemployment Insurance Final Payments.....	VEC
Average Manhours.....	VEC
Average Hourly Earnings.....	VEC
Average Weekly Earnings.....	VEC
Average Workweek.....	VEC
New Business Incorporations.....	Virginia State Corporation Commission
Valuation of Building Permits - 18 Cities.....	Local Building Inspectors
New Vehicle Registrations.....	Virginia State Division of Motor Vehicles
Electrical Power Sales.....	Virginia Power, Appalachian Power Co., Delmarva Electric Co., Tennessee Power Company
Taxable Retail Sales.....	Virginia State Department of Taxation
Taxable Retail Sales/CPI.....	Virginia State Department of Taxation

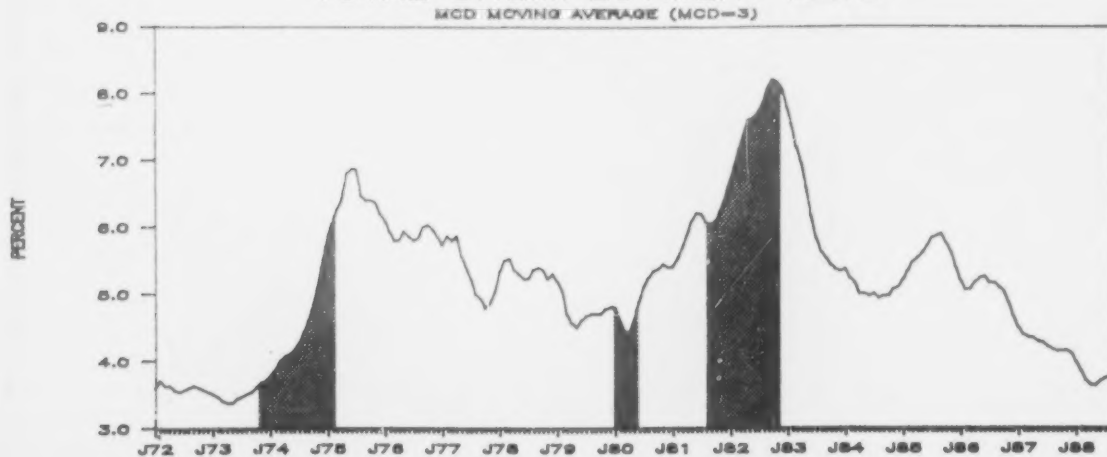
NONAG WAGE & SALARY EMPLOYMENT



MANUFACTURING EMPLOYMENT

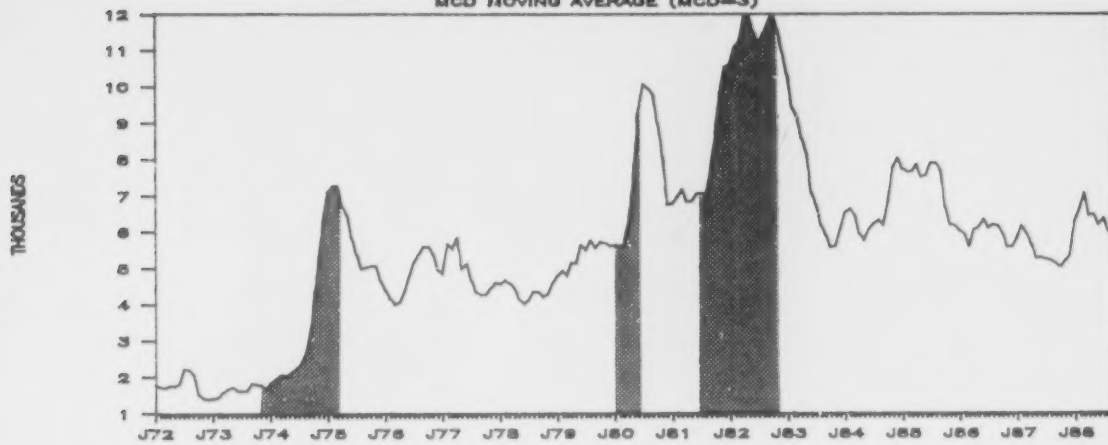


TOTAL UNEMPLOYMENT RATE



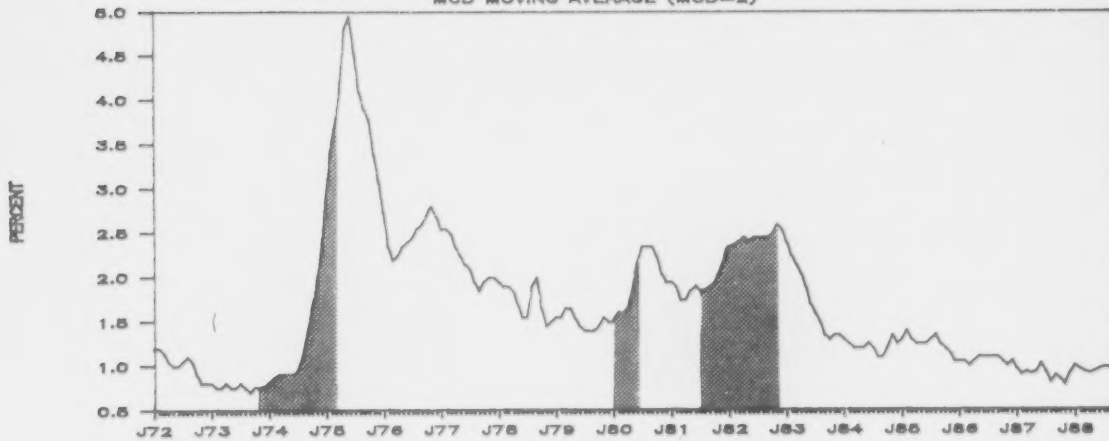
AVERAGE WEEKLY INITIAL CLAIMS

MCD MOVING AVERAGE (MCD=3)



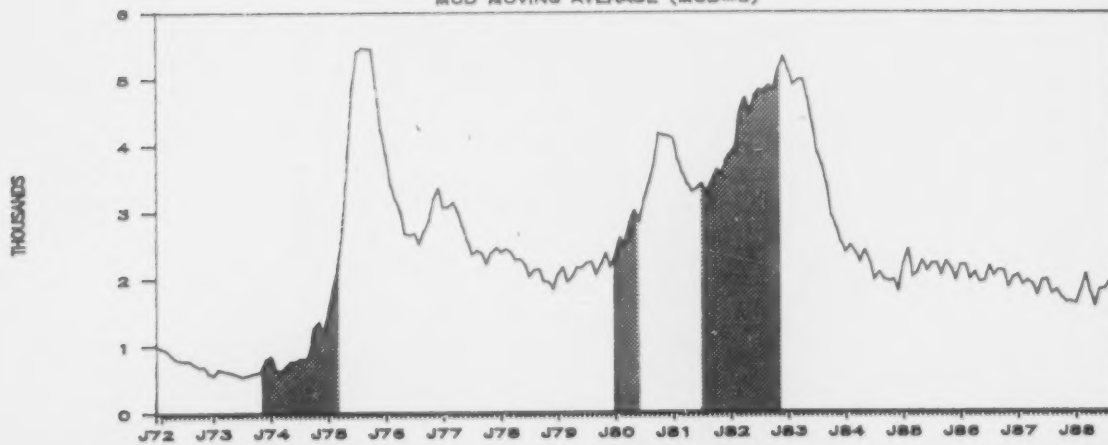
INSURED UNEMPLOYMENT RATE

MCD MOVING AVERAGE (MCD=2)

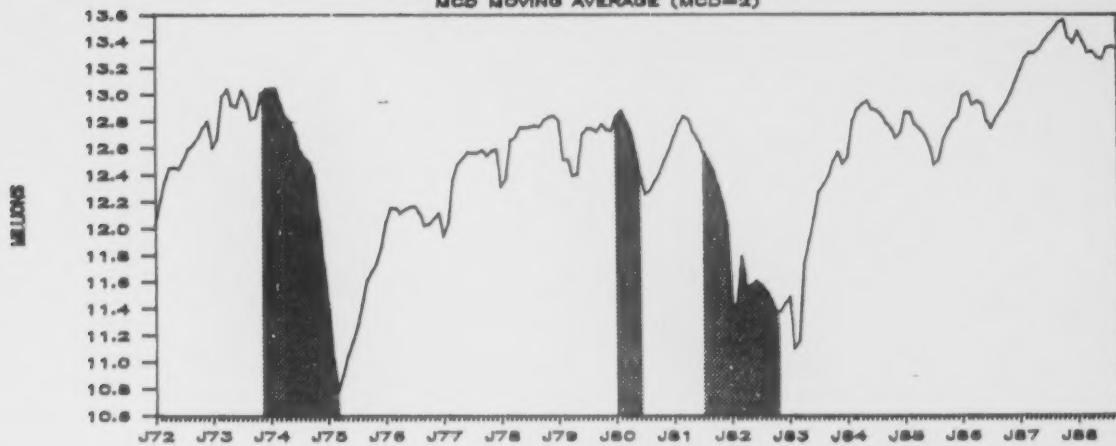


U. I. FINAL PAYMENTS

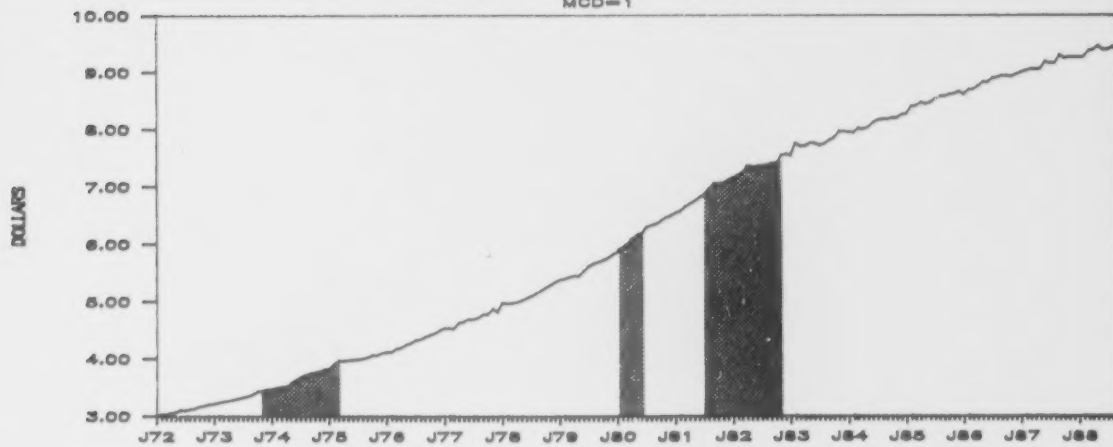
MCD MOVING AVERAGE (MCD=3)



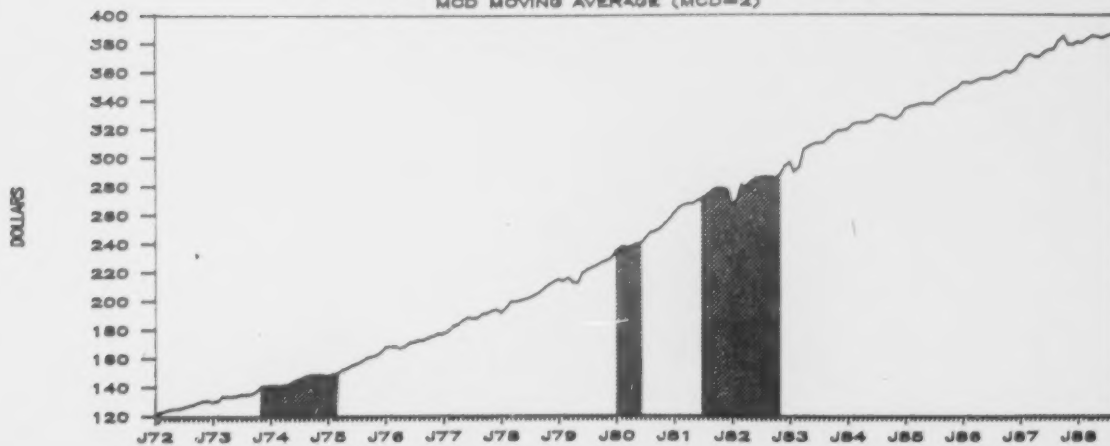
AVERAGE MANHOURS MCD MOVING AVERAGE (MCD=2)



AVERAGE HOURLY EARNINGS MCD=1

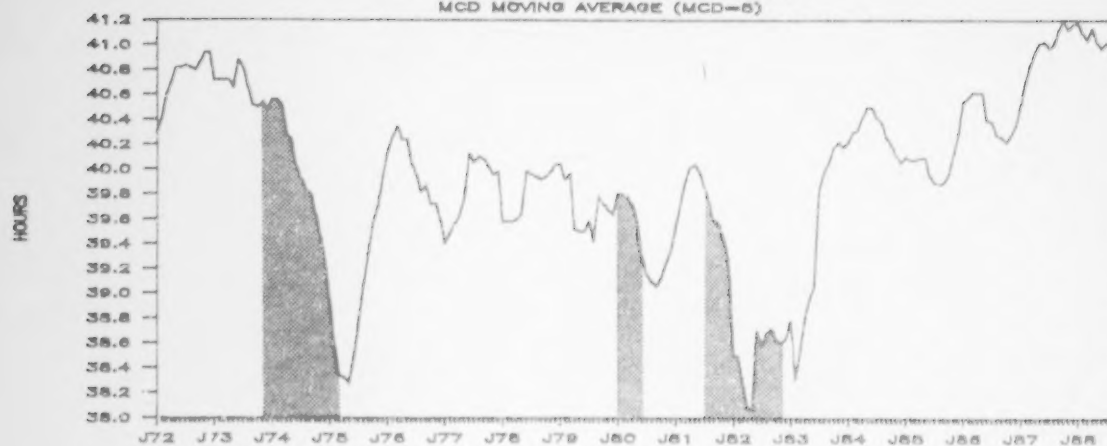


AVERAGE WEEKLY EARNINGS MCD MOVING AVERAGE (MCD=2)



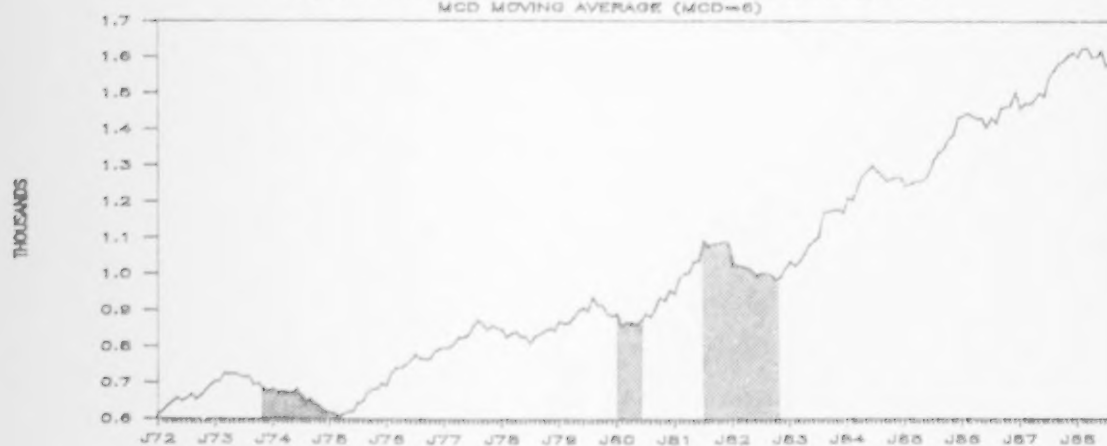
AVERAGE WORKWEEK

MCD MOVING AVERAGE (MCD=5)



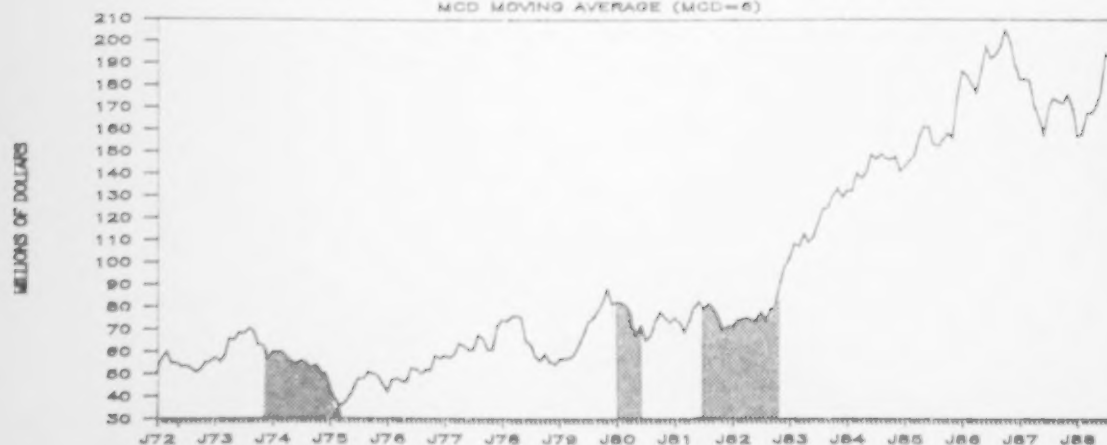
NEW BUSINESS INCORPORATIONS

MCD MOVING AVERAGE (MCD=6)



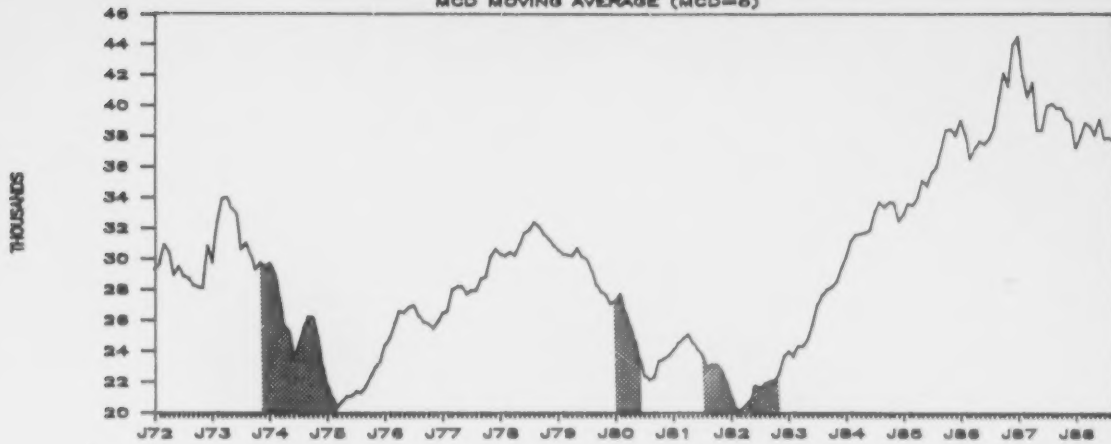
VALUATION OF BUILDING PERMITS

MCD MOVING AVERAGE (MCD=6)



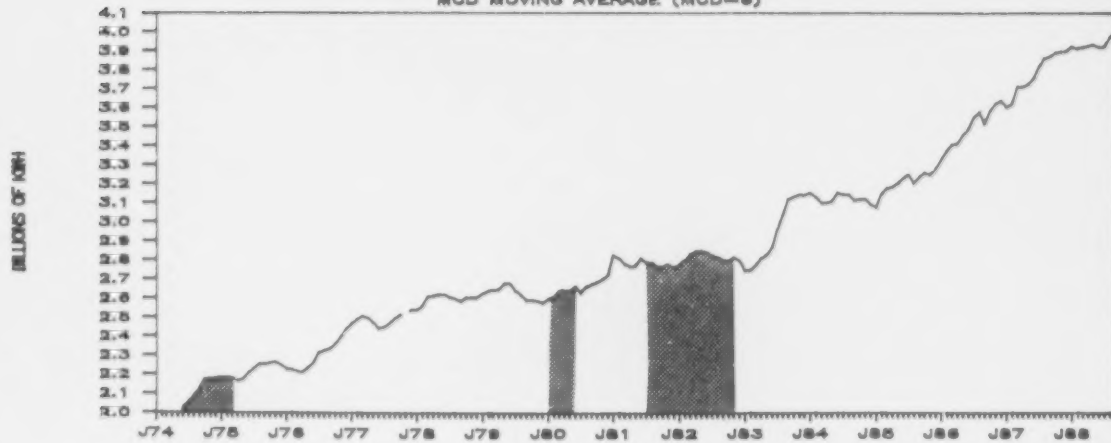
NEW VEHICLE REGISTRATIONS

MCD MOVING AVERAGE (MCD=6)



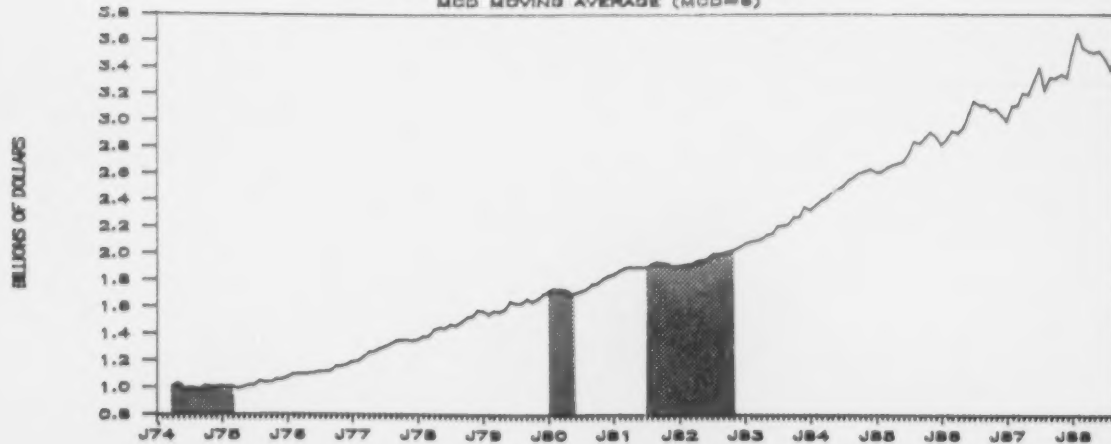
ELECTRICAL POWER SALES

MCD MOVING AVERAGE (MCD=6)



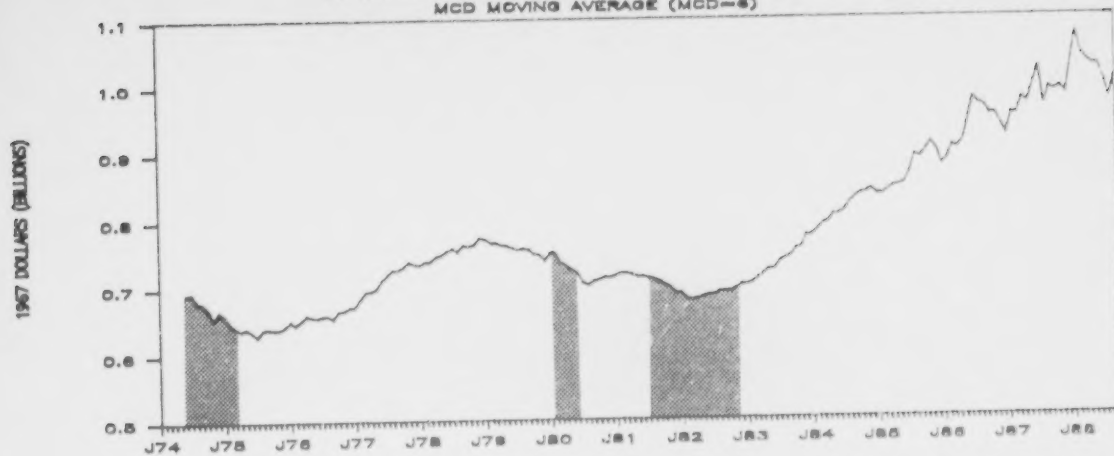
TAXABLE RETAIL SALES

MCD MOVING AVERAGE (MCD=6)



TAXABLE RETAIL SALES/CPI

MCD MOVING AVERAGE (MCD=6)



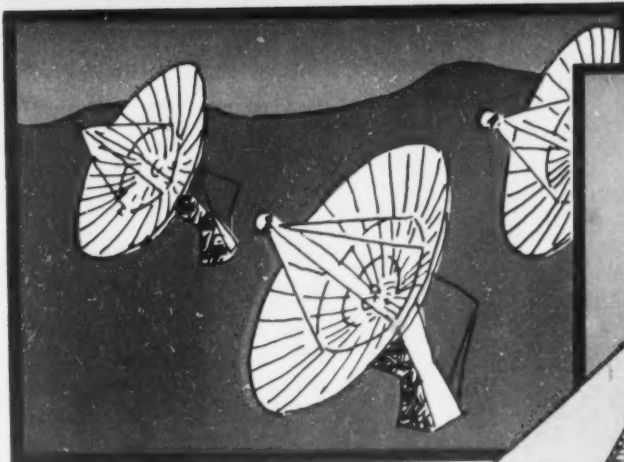
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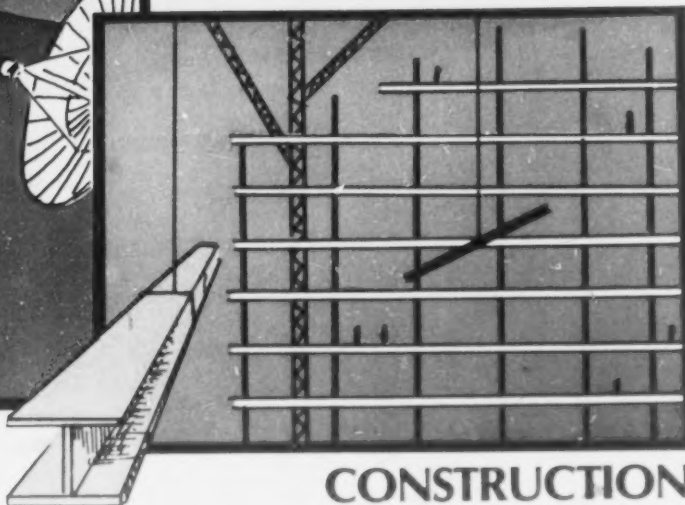
VIRGINIA ECONOMIC INDICATORS

VOL. XX NO. 4

4th QUARTER 1988 DATA



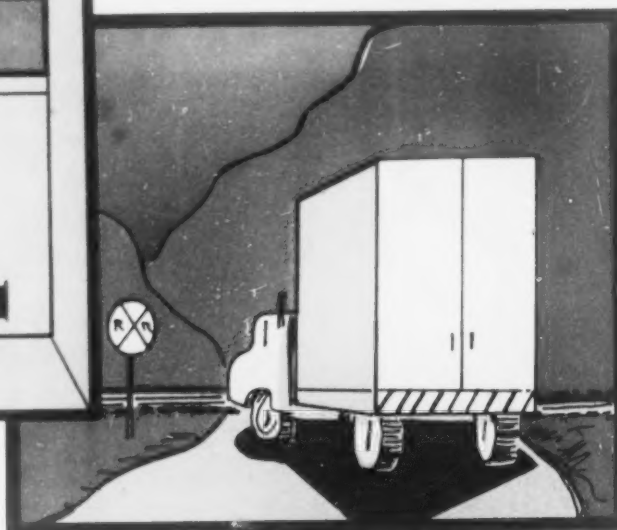
COMMUNICATION



CONSTRUCTION



BANKING



TRANSPORTATION

FOREWORD

This publication is designed to depict the movement of Virginia's key economic indicators in graphic and tabular form with accompanying narrative analysis.

We welcome any comments, suggestions, or questions concerning Virginia Economic Indicators. Please contact Dolores A. Esser, Director, Economic Information Services Division, P. O. Box 1358, Richmond, Virginia 23211, (804) 786-7496, for additional information or explanation of the contents of this document.

TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
FOREWORD.....	iii	BUSINESS INDICATORS, JANUARY 1987 TO DECEMBER 1988.....	10
ECONOMIC OUTLOOK - U. S.....	1	o New Business Incorporations	
HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS, FOURTH QUARTER 1988....	2	o Valuation of Building Permits	
VIRGINIA INDICATORS, FOURTH QUARTER DATA.....	4	o New Vehicle Registrations	
EMPLOYMENT AND UNEMPLOYMENT INDICATORS, JANUARY 1987 TO DECEMBER 1988.....	6	o Electrical Power Sales	
o Nonagricultural Wage & Salary Employment		o Taxable Retail Sales	
o Manufacturing Employment		DATA SUMMARY, DECEMBER 1988.....	12
o Total Unemployment Rate		SUMMARY: MOVEMENT OF INDICATORS, JANUARY 1987 TO DECEMBER 1988.....	12
o Average Weekly Initial Claims		DATA SUMMARY, OCTOBER AND NOVEMBER 1988.....	13
o Average Weekly Insured Unemployment Rate		THE VIRGINIA LEADING AND COINCIDENT INDEXES.....	14
o U. I. Final Payments		A REVIEW OF NONAGRICULTURAL EMPLOYMENT'S PERFORMANCE IN 1988 AND SUMMARY EMPLOYMENT FORECASTS FOR 1989-1991.....	16
MANUFACTURING PRODUCTION WORKER INDICATORS, JANUARY 1987 TO DECEMBER 1988.....	8	HISTORICAL SUMMARY, PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE.....	19
o Average Weekly Hours			
o Average Manhours			
o Average Hourly Earnings			
o Average Weekly Earnings			

ECONOMIC OUTLOOK - U. S.

VOL. XX, NO. 4

FOURTH QUARTER DATA

1989, 1990, and 1991 U. S. Forecast Highlights

- o A better than expected Fourth Quarter 1988 pushes back the start of the economic slowdown to the second half of 1989.
 - Real growth in Gross National Product (GNP) is expected to be fairly strong in the first and second quarters of 1989, averaging 3.8 percent on an annual basis.
 - The inflation rate increases to 5.1 percent compared to 4.1 percent in 1988.
 - The Federal Reserve Board will continue to try to contain further increases in the inflation rate by raising interest rates.
 - As a result of the Fed's policy, real GNP growth in the second half of 1989 will be much weaker than the first half's growth, averaging only 1.1 percent on an annual basis.
- o Despite slower growth in 1989, the economy should not slide into a recession.
 - Capital spending remains strong as long-term interest rates do not increase with short-term rates.
 - Exports gain as the dollar falls an average of 8.3 percent against major currencies.
- o Real growth will rebound in the middle of 1990, but will average only 1.7 percent due to a very slow first half.
 - Unemployment will hover around 6.0 percent in 1990, then decline to 5.7 percent in 1991.
 - Inflation will remain at 5.1 percent in 1990.
- o By 1991, the economy will be having real annual growth of 3.1 percent, with unemployment and inflation down to 5.7 percent and 5.0 percent, respectively.
- o Exports, over the forecast period, will benefit from the continuing, but gradual decline of the dollar.
- o Oil prices should remain stable (\$15-\$17) due to weak economic growth in late 1989 and early 1990.
- o If an agreement can be reached on the duration of the entry level training wage, the minimum wage will be increased in the fourth quarter of each of the forecast years. By 1991, the minimum wage could be as high as \$4.55 per hour.

James P. Wilson

HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS FOURTH QUARTER 1988

- o During Fourth Quarter 1988, three Virginia economic indicator series set all-time records.
 - The strong performing nonagricultural wage and salary employment series advanced steadily, setting new records each month and finishing the quarter at 2,835,200 jobs in December for an impressive 4.0 percent annual job gain. Nonfarm employment in 1988 averaged 3.7 percent above the 1987 employment average with six of the eight major employing divisions at record levels.
 - Reflecting the current prosperity in Virginia, hourly earnings for production workers climbed to \$9.48 in November and remained at that level for December. This was a 2.7 percent annual gain.
 - Production worker weekly wages rose to \$390.63 in November.
- o Two other series exhibited near-record performances this quarter.
 - The very strong employment picture in Virginia reduced final payments for unemployment insurance to 1,452 in December, the lowest level registered in 14 years.
 - A last-minute surge in Christmas shopping pushed the taxable retail sales level to \$4,380.3 million in December, second only to the all-time record January 1988 figure of \$4,397.4 million.
- o According to the Bureau of Labor Statistics (BLS) of the U. S. Department of Labor, productivity nationally fell at a 2.0 percent annual rate during Fourth Quarter 1988 in the business sector, in contrast with the 1.7 percent gain during Third Quarter 1988. The business sector measure is the most comprehensive indicator of productivity change. The decline in Fourth Quarter 1988 reflects a drop in farm productivity, which does not affect the nonfarm business or manufacturing measures. Output in the business sector rose 2.1 percent and hours of all persons engaged in the sector increased 4.1 percent (seasonally adjusted annual rates). During Third Quarter 1988, output increased 2.8 percent and hours of all persons increased 1.1 percent.
- o BLS also reported annual 1988 U. S. productivity figures. Productivity advanced moderately in 1988 in the business and nonfarm business sectors. The gains in 1988 were larger than those of 1987. In manufacturing, productivity growth was more rapid than in the broader sectors, but smaller than the preceding year's increase. Business productivity for 1988 was 1.0 percent higher than in 1987, as output advanced 4.5 percent and hours of all persons rose 3.4 percent. During 1987, productivity rose 0.8 percent. Productivity, output, and employment have increased in every year since the recession year of 1982. Hourly compensation increased 4.8 percent in 1988, compared with a 4.0 percent gain during 1987. Unit labor costs increased 3.7 percent during 1988 and 3.1 percent in 1987; the 1988 increase was the largest since the 8.3 percent rise of 1982.
- o The Consumer Price Index for All Urban Consumers (CPI-U) registered an annual gain of 4.1 percent in 1988 to average 118.3 (1982-4 = 100). This compared to a 3.7 percent rise in the average CPI-U in 1987. A surge in

export demand, coupled with high domestic consumer spending and business capital investment, at a time when plants were already near peak capacity, caused the slightly faster rate of inflation in 1988. A summer-long drought in the Midwest, the nation's major food-producing region, caused higher food prices by year's end.

- o The population of Virginia increased 12.1 percent between April 1, 1980, and July 1, 1988, from 5,346,818 to 5,996,000 according to the Center for Public Service at the University of Virginia.
- o The U. S. Census Bureau ranked Virginia first for per capita federal expenditures nationwide in fiscal 1988, at \$5,954 per Virginian. Rich in defense operations and government employees, Virginia has placed near the top since the Census Bureau began its per capita comparison in 1982. Virginia was listed first in 1983 and second in 1987. Pentagon contracts to build two nuclear-powered aircraft

carriers boosted Virginia to the top spot in the nation last year for federal money spent per state resident.

- o The number of farms in Virginia declined from 51,859 in 1982 to 44,799 in 1987, the U. S. Census Bureau reported. The number of farms with product sales of \$10,000 or more also declined during the period from 17,920 to 15,602. The Census Bureau defines a farm as any place that produces agricultural products valued at \$1,000 or more. While the number of farms was declining, the average farm size grew from 182 acres in 1982 to 194 acres in 1987.

Coal production in Virginia in 1988, at 48,286,000 short tons, was 9.3 percent ahead of the 44,194,000 short tons mined in 1987. Virginia mine employment averaged 15,900 jobs in 1988, unchanged from the 1987 employment average. The 1988 stabilization of mine employment followed five consecutive years of decline.

VIRGINIA INDICATORS FOURTH QUARTER DATA

The fifteen series used to measure the Virginia economy as a composite were slightly more positive in the fourth quarter than they have been for several quarters. The indicator series seemed to mirror the underlying strength of the Virginia economy as it entered its seventh year of the current upturn in the business cycle in November. Employment seems to be the driving force in the Virginia economy as this series continues to break records month after month. Labor shortage situations are becoming more of a problem, particularly within the Virginia portion of the so-called "Golden Crescent"--the booming area stretching from Northern Virginia, through Richmond, down the Peninsula, to Norfolk and Virginia Beach.

While most series remained at high levels, three series set new records this quarter. Nonagricultural employment advanced steadily, reaching a record 2,835,200 jobs in December for a 4.0 percent annual gain. Wages reflected the recent prosperity in Virginia with hourly wages for production workers reaching a record \$9.48 in both November and December. Weekly production wages climbed to a record \$390.63 in November. Also, two series were at near-record levels this quarter. With the number of new jobs being created, final unemployment insurance payments fell to the lowest level in 14 years in December. A strong Christmas season pushed taxable retail sales to \$4,380.3 million this December, the second highest level on record.

The indicators assumed an overall positive stance each month of the fourth quarter. In October, seven series were up, five were down, and three were unchanged. November saw

nine series up and six down. December had nine series positive, four down, and two unchanged.

The six-month moving average of rising indicators (page 12) serves to illustrate the quarter's performance. The moving average enhances analysis because it smoothes out much of the irregularity present in many of the individual series.

Employment Still a Leader as Three Series Break Records

Both employment series were positive in 1988's final quarter. Nonagricultural wage and salary employment continued the expansion it has enjoyed all year, establishing new records each month of the quarter. Nonfarm employment finished the quarter at 2,835,200 jobs for Virginia workers, 108,200 jobs or 4.0 percent above December 1987. Manufacturing employment was practically unchanged in October, then increased in each remaining month to finish the quarter at 428,100 jobs. While factory employment rallied in the final months of 1988, it was still 3,000 jobs or 0.7 percent below December 1987. Plants being near-full capacity utilization and a shortage of trained production workers seemed to be limiting plant job growth.

The four unemployment related series were mostly positive in October, registered all negative in November, then shifted back to slightly positive in December. The total unemployment rate was down 0.5 percent from September to 3.9 percent in October, then inched up to 4.1 percent in November and 4.2 percent in December. Total unemployment's rise in the final months of the year seemed to reflect fairly

rapid growth in Virginia's labor force. Initial claims for unemployment insurance showed a modest increase to 5,716 in October, climbed to 6,517 in November (to some extent, reflecting the brief closing of the Avtex chemical plant in Front Royal), then fell to 6,154 in December. The insured unemployment rate moved down 0.1 percent to 0.8 percent in October then moved back up to 0.9 percent for both November and December. Unemployment insurance final payments fell in October, were up in November, and then fell again in December to 1,452, the lowest level in 14 years.

The production worker series were slightly positive in October, strengthened in November, then trailed off in December. Although they do not seem to exhibit quite the strength that they were displaying a year ago, these series moved through a relatively narrow range in the fourth quarter. Average hourly earnings and average weekly earnings did manage to set new records in November at \$9.48 and \$390.63, respectively. Hourly wages held this level in December, but weekly wages fell to \$386.40. The five business-related indicators gathered momentum as the

quarter wore on, going from four negative in October to all positive by December. New business incorporations were down in October before improving in both November and December. At a respectable 1,733 in December, incorporations were still below the August 1988 record of 1,817. The volatile valuation of building permits issued had been at \$235.3 million in September, the second highest level ever. This indicator fell nearly 30 percent in October, was little changed in November, then increased 29 percent in December to \$214.2 million.

New vehicle registrations were up in October as the remaining 1988 models were cleared out of dealers' stocks, fell in November, then regained much of the lost ground in December. Electric power sales were off in October, recovered in November, and were just slightly higher in December, moving within a fairly narrow range throughout the quarter. Taxable retail sales deteriorated in October and November, but bounced back nearly 34 percent in December to \$4,380.3 million, a level second only to last January, as Christmas sales were stronger than expected.

William F. Mezger

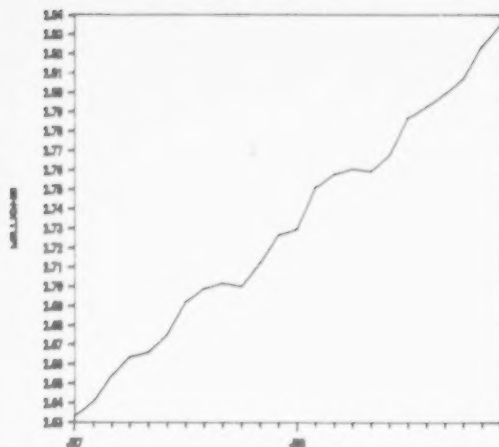
EMPLOYMENT AND UNEMPLOYMENT INDICATORS

January 1987 to December 1988

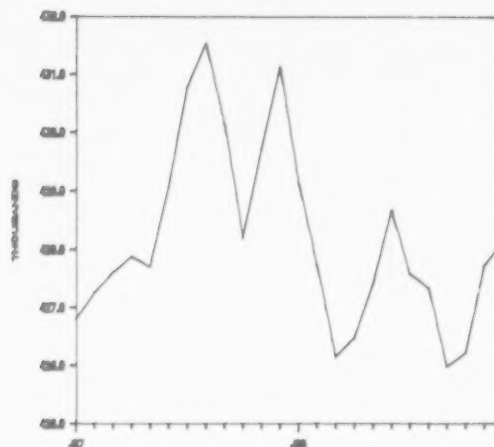
	Nonag Wage & Salary Employment* (Thous)		Manufacturing Employment* (Thousands)		Total Unemployment Rate* (Percent)	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
January, 1987	2,588.5	2,633.3	423.4	426.8	4.9	4.4
February	2,587.9	2,640.7	424.7	427.3	4.6	4.2
March	2,622.4	2,654.3	425.9	427.6	5.0	4.7
April	2,653.2	2,663.9	426.6	427.9	4.4	4.5
May	2,679.7	2,666.4	426.0	427.7	4.3	4.4
June	2,710.2	2,675.4	429.5	429.1	4.4	4.4
July	2,695.1	2,692.4	429.5	430.8	3.4	3.4
August	2,699.2	2,699.2	432.4	431.5	3.8	4.0
September	2,718.4	2,702.2	433.6	430.2	4.2	4.5
October	2,722.0	2,700.4	431.2	428.2	4.0	4.3
November	2,736.9	2,712.5	432.3	429.7	3.9	4.0
December	2,751.5	2,727.0	432.0	431.1	4.0	4.1
January, 1988	2,683.6	2,730.0	425.7	429.1	4.4	3.9
February	2,696.4	2,751.4	425.6	427.7	4.0	3.7
March	2,725.2	2,758.3	423.6	426.2	3.8	3.6
April	2,750.0	2,761.0	425.2	426.5	3.8	3.9
May	2,773.5	2,759.7	425.7	427.4	3.5	3.6
June	2,801.3	2,768.1	429.1	428.7	3.7	3.7
July	2,790.2	2,787.4	426.3	427.6	3.5	3.5
August	2,793.0	2,793.0	428.2	427.3	3.8	4.0
September	2,813.6	2,799.6	429.4	426.0	4.1	4.4
October	2,829.9	2,807.4	429.2	426.2	3.7	3.9
November	2,849.4	2,824.0	430.3	427.7	4.0	4.1
December	2,860.7	2,835.2	429.0	428.1	4.1	4.2
	Average Weekly Initials Claims		Avg. Wkly. Insured Unemployment Rate(%)		U. I. Final Payments	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
January, 1987	9,593	6,153	1.3	0.8	1,970	1,885
February	7,054	6,237	1.3	1.0	1,849	1,922
March	4,828	5,549	1.1	0.9	2,327	1,991
April	4,484	5,263	0.9	0.9	2,661	1,828
May	3,519	5,093	0.8	0.9	1,917	1,661
June	4,810	5,561	0.9	1.1	2,268	2,257
July	5,192	5,115	0.7	0.8	1,834	1,703
August	3,530	4,979	0.7	0.9	1,639	1,827
September	3,478	5,326	0.7	0.9	1,454	1,800
October	3,535	4,751	0.6	0.8	1,288	1,626
November	5,329	5,511	0.7	0.8	1,177	1,653
December	11,354	5,814	1.1	1.0	1,510	1,640
January, 1988	11,715	7,558	1.5	1.0	1,655	1,576
February	7,323	6,435	1.3	1.0	1,938	2,012
March	6,252	7,236	1.1	0.9	2,442	2,098
April	4,901	5,759	0.9	0.9	2,157	1,476
May	4,470	6,507	0.8	0.9	1,945	1,685
June	5,521	6,375	0.8	1.0	1,964	1,960
July	6,361	6,249	0.9	1.0	1,868	1,728
August	3,951	5,557	0.8	1.0	1,917	2,147
September	3,525	5,390	0.7	0.9	1,437	1,772
October	4,213	5,716	0.6	0.8	1,228	1,545
November	6,289	6,517	0.8	0.9	1,273	1,803
December	12,074	6,154	1.0	0.9	1,340	1,452

* These series have been adjusted to first quarter 1988 benchmarks.

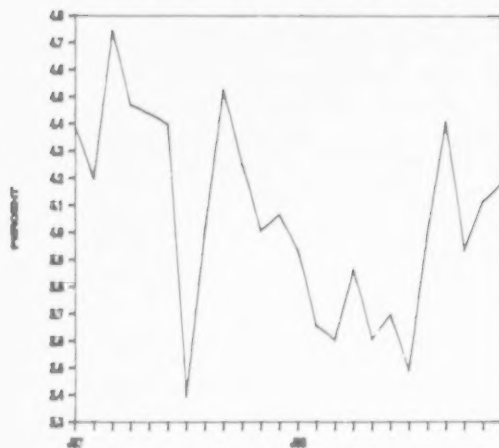
NONAG W & S EMPLOYMENT



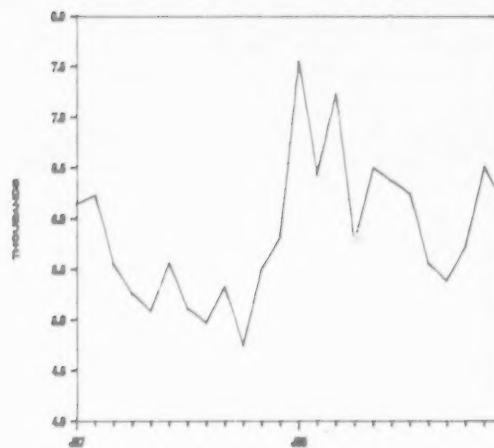
MANUFACTURING EMPLOYMENT



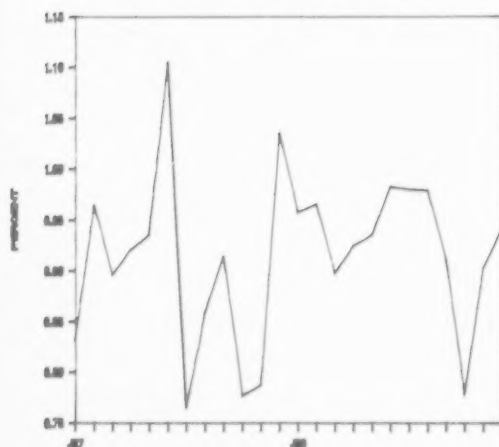
TOTAL UNEMPLOYMENT RATE



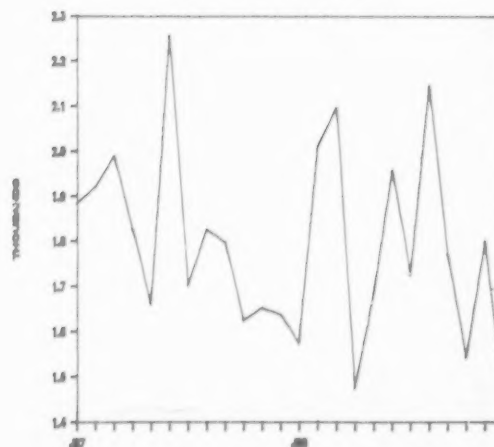
AVG. WEEKLY INITIAL CLAIMS



INSURED UNEMPLOYMENT RATE



U.I. FINAL PAYMENTS

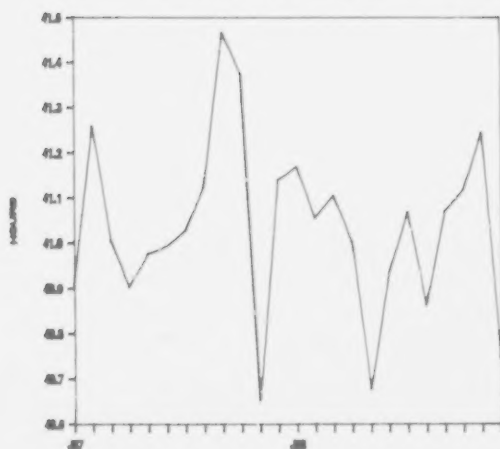


MANUFACTURING PRODUCTION WORKER INDICATORS
January 1987 to December 1988

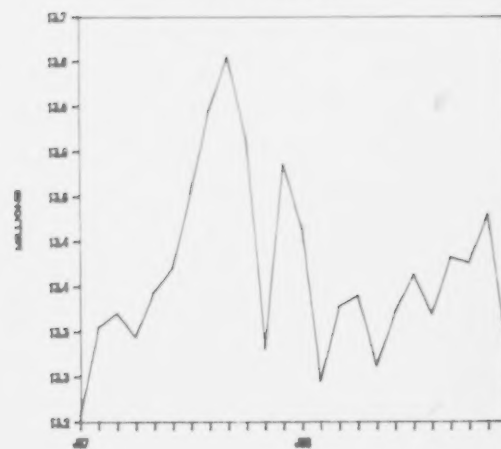
	Average Weekly Hours*		Average Manhours* (Thousands)	
	Unadj.	Adj.	Unadj.	Adj.
January, 1987	40.5	40.9	12,996.5	13,207.8
February	40.6	41.3	13,052.9	13,305.7
March	40.8	41.0	13,174.3	13,320.8
April	40.7	40.9	13,162.4	13,295.4
May	41.1	41.0	13,304.1	13,344.1
June	41.2	41.0	13,464.2	13,370.6
July	40.7	41.0	13,292.6	13,454.0
August	41.0	41.1	13,505.4	13,546.0
September	41.8	41.5	13,823.3	13,605.6
October	41.5	41.4	13,636.9	13,515.3
November	41.1	40.7	13,534.2	13,281.8
December	41.8	41.1	13,756.4	13,486.7
January, 1988	40.8	41.2	13,215.1	13,416.3
February	40.4	41.1	13,007.5	13,245.9
March	40.9	41.1	13,182.1	13,328.7
April	40.8	41.0	13,207.0	13,340.4
May	40.8	40.7	13,223.3	13,263.1
June	41.1	40.9	13,415.0	13,321.7
July	40.7	41.1	13,203.1	13,363.5
August	40.7	40.9	13,280.4	13,320.4
September	41.4	41.1	13,597.2	13,383.1
October	41.2	41.1	13,497.1	13,376.7
November	41.7	41.2	13,685.9	13,430.7
December	41.4	40.7	13,541.9	13,276.4
	Average Hourly Earnings* (Dollars)		Average Weekly Earnings* (Dollars)	
	Unadj.	Adj.	Unadj.	Adj.
January, 1987	9.05	9.00	366.53	367.63
February	9.07	9.03	368.24	373.09
March	9.07	9.06	370.06	371.92
April	9.04	9.06	367.93	370.15
May	9.02	9.06	370.72	371.46
June	9.15	9.18	376.98	375.48
July	9.15	9.15	372.41	375.41
August	9.11	9.14	373.51	375.39
September	9.27	9.27	387.49	385.56
October	9.19	9.22	381.39	382.15
November	9.23	9.23	379.35	374.85
December	9.27	9.23	387.49	379.89
January, 1988	9.27	9.23	378.22	379.36
February	9.28	9.24	374.91	379.85
March	9.35	9.34	382.42	384.34
April	9.34	9.36	381.07	383.37
May	9.35	9.40	381.48	381.86
June	9.31	9.34	382.64	381.12
July	9.30	9.29	378.51	381.56
August	9.35	9.38	380.55	382.46
September	9.34	9.34	386.68	384.76
October	9.37	9.40	386.04	386.81
November	9.48	9.48	395.32	390.63
December	9.52	9.48	394.13	386.40

* These series have been adjusted to first quarter 1988 benchmarks.

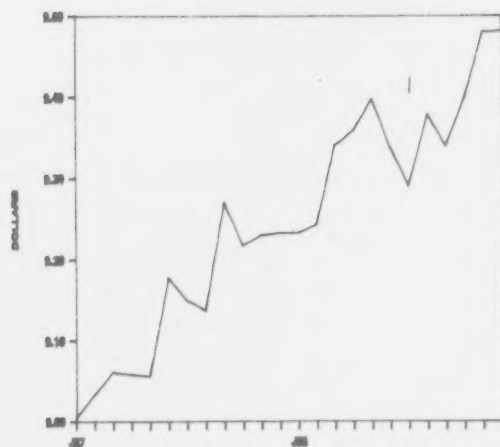
AVERAGE WEEKLY HOURS



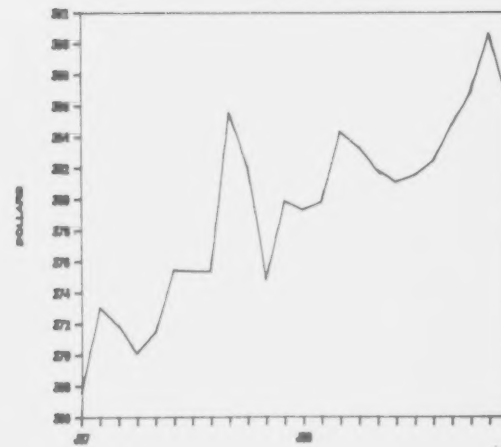
AVERAGE MANHOURS



AVERAGE HOURLY EARNINGS



AVERAGE WEEKLY EARNINGS

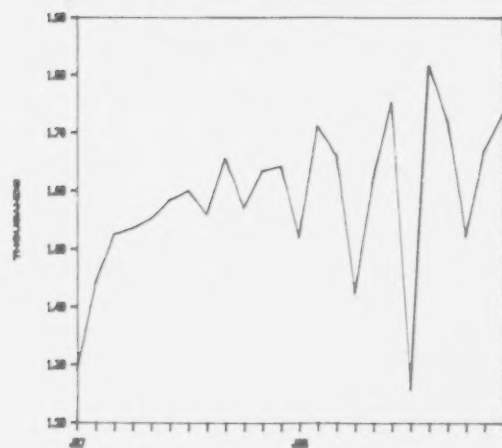


BUSINESS INDICATORS
January 1987 to December 1988

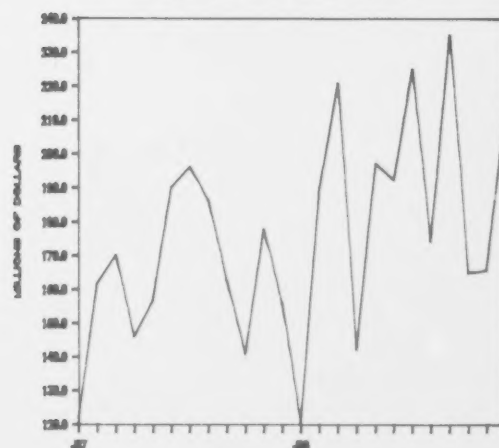
	New Business Incorporations		Valuation of Building Permits (\$ Millions)		New Vehicle Registrations	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
January, 1987	1,237	1,293	111.8	122.2	41,798	41,840
February	1,453	1,444	123.4	161.9	28,975	34,169
March	1,707	1,527	195.0	170.3	41,798	39,960
April	1,694	1,537	157.4	146.1	43,113	40,105
May	1,582	1,554	165.1	156.6	39,956	36,192
June	1,584	1,586	258.0	190.3	47,997	41,882
July	1,624	1,602	190.1	196.2	46,707	41,965
August	1,541	1,561	185.2	186.7	41,958	40,855
September	1,519	1,656	148.5	163.0	42,661	38,712
October	1,593	1,573	148.5	141.0	36,593	36,159
November	1,436	1,636	171.4	178.0	31,180	38,494
December	1,638	1,645	127.8	156.2	29,350	40,764
January, 1988	1,451	1,523	110.8	120.4	32,226	32,098
February	1,724	1,714	144.9	189.9	35,797	42,313
March	1,861	1,665	252.9	221.1	42,684	41,003
April	1,573	1,426	153.2	142.4	40,207	37,472
May	1,650	1,622	209.4	197.2	41,767	37,798
June	1,749	1,754	261.2	192.6	42,562	37,237
July	1,280	1,259	215.1	225.2	40,127	36,053
August	1,790	1,817	172.4	174.5	42,282	41,291
September	1,581	1,724	215.1	235.3	39,684	35,816
October	1,547	1,524	174.1	165.2	39,686	39,023
November	1,466	1,672	159.8	165.9	24,976	30,949
December	1,733	1,733	177.8	214.2	27,286	38,003

	Electrical Power Sales (Mil. of KWH)		Taxable Retail Sales (\$ Millions)	
	Unadj.	Adj.	Unadj.	Adj.
January, 1987	4,142.9	3,571.5	2,388.1	2,767.2
February	4,221.3	3,769.0	3,569.4	3,926.7
March	3,879.1	3,777.1	2,985.7	3,152.8
April	3,381.9	3,741.0	3,109.4	3,242.3
May	3,177.8	3,787.6	3,472.1	3,220.9
June	3,756.6	3,864.8	3,579.4	3,488.7
July	4,237.3	3,938.0	3,352.7	3,376.3
August	4,511.6	4,024.6	3,082.5	2,897.1
September	3,972.2	3,856.5	3,658.5	3,729.4
October	3,396.8	3,855.6	3,123.3	3,226.5
November	3,326.4	3,827.8	3,583.5	3,396.7
December	3,929.5	3,910.0	3,861.0	3,360.3
January, 1988	4,709.7	4,067.1	3,781.8	4,397.4
February	4,448.0	3,967.9	3,501.8	3,843.9
March	4,008.3	3,895.3	2,935.0	3,092.7
April	3,518.9	3,901.2	2,934.9	3,063.6
May	3,251.7	3,875.7	3,570.8	3,312.4
June	3,704.3	3,822.8	3,541.0	3,444.6
July	4,382.5	4,073.0	4,034.6	4,075.4
August	4,764.8	4,250.5	3,550.4	3,321.2
September	4,200.1	4,085.7	3,705.1	3,784.6
October	3,469.0	3,933.1	3,451.0	3,576.2
November	3,508.6	4,157.4	3,462.9	3,273.1
December	4,217.9	4,192.7	5,002.3	4,380.3

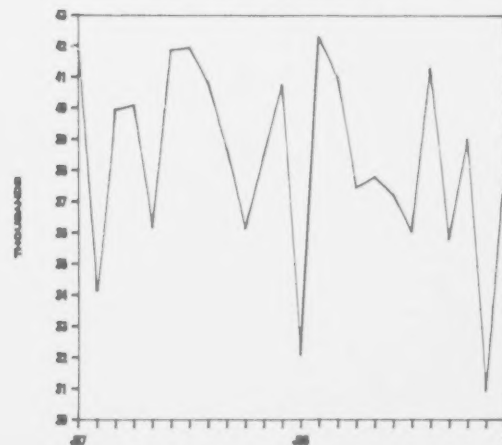
NEW BUSINESS INCORPORATIONS



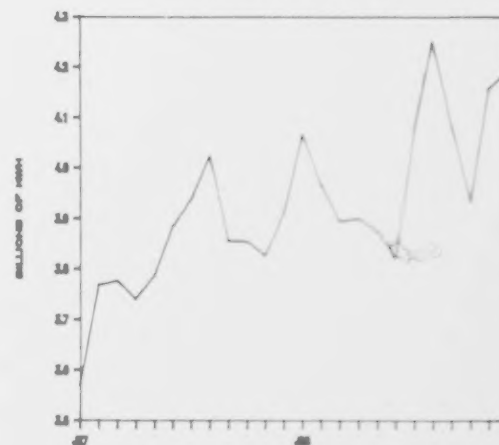
VALUATION OF BUILDING PERMITS



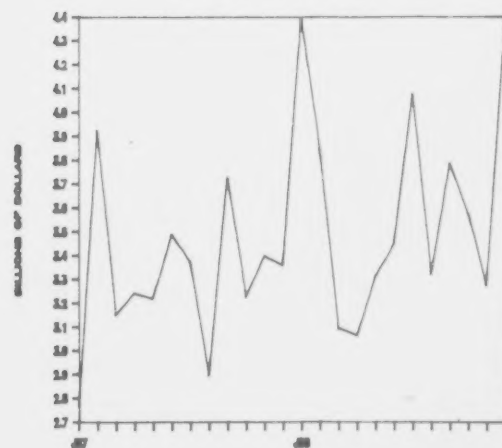
NEW VEHICLE REGISTRATIONS



ELECTRICAL POWER SALES



TAXABLE RETAIL SALES



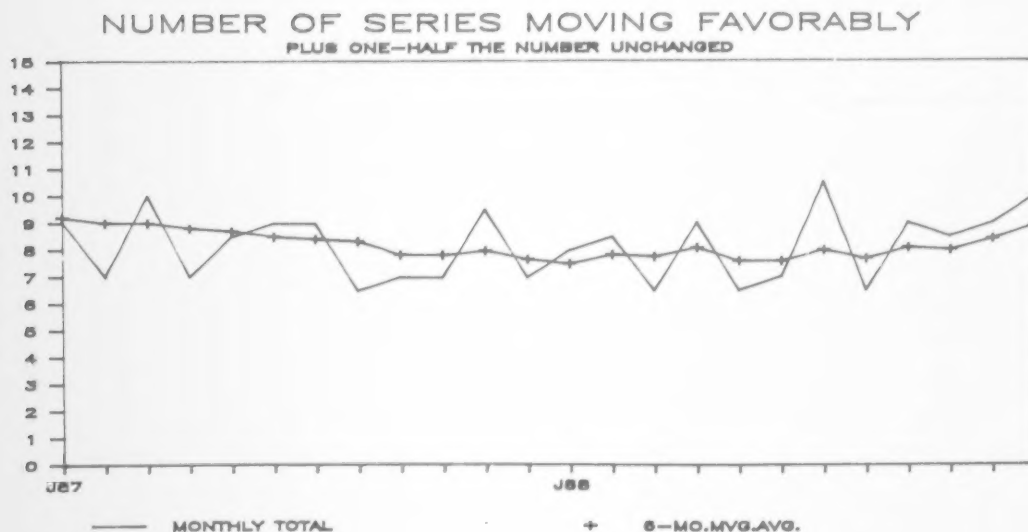
DATA SUMMARY
DECEMBER 1988
(SEASONALLY ADJUSTED DATA)

	Dec. 1988	Nov. 1988	Dec. 1987	Percent & (Direction**) of Change Nov. '88- Dec. '88	Dec. '87- Dec. '88
EMPLOYMENT					
*Nonagricultural Wage & Salary Employment (000)	2,835.2	2,824.0	2,727.0	0.4 (+)	4.0 (+)
*Manufacturing Employment (000)	428.1	427.7	431.1	0.1 (+)	-0.7 (-)
UNEMPLOYMENT					
*Total Unemployment Rate (%)	4.2	4.1	4.1	(-)	(-)
Average Weekly Initial Claims	6,154	6,517	5,814	-5.6 (+)	5.8 (-)
Average Weekly Insured Unemployment Rate (%)	0.9	0.9	1.0	(0)	(+)
Unemployment Insurance Final Payments	1,452	1,803	1,640	-19.5 (+)	-11.5 (+)
MANUFACTURING PRODUCTION WORKERS					
*Average Weekly Hours	40.7	41.2	41.1	-1.2 (-)	-1.0 (-)
*Average Manhours (000)	13,276.4	13,430.7	13,486.7	-1.1 (-)	-1.6 (-)
*Average Hourly Earnings (\$)	9.48	9.48	9.23	0.0 (0)	2.7 (+)
*Average Weekly Earnings (\$)	386.40	390.63	379.89	-1.1 (-)	1.7 (+)
BUSINESS					
New Business Incorporations	1,733	1,672	1,645	3.6 (+)	5.3 (+)
Valuation of Building Permits -18 Cities (\$M)	214.2	165.9	156.2	29.1 (+)	37.1 (+)
New Vehicle Registrations	38,003	30,949	40,764	22.8 (+)	-6.8 (-)
Electrical Power Sales (M of KWH)	4,191.8	4,157.4	3,910.0	0.8 (+)	7.2 (+)
Taxable Retail Sales (\$M)	4,380.3	3,273.1	3,360.3	33.8 (+)	30.4 (+)

* Revised to First Quarter 1988 benchmarks

** + = Favorable, - = Not Favorable, 0 = No Change (less than .05%)

SUMMARY



	Percent & (Direction**) of Change				
DATA SUMMARY					
NOVEMBER 1988	Nov.	Oct.	Nov.	Oct. '88-	Nov. '87-
(SEASONALLY ADJUSTED DATA)	1988	1988	1987	Nov. '88	Nov. '88
EMPLOYMENT					
*Nonagricultural Wage & Salary Employment (000)	2,824.0	2,807.4	2,712.5	0.6 (+)	4.1 (+)
*Manufacturing Employment (000)	427.7	426.2	429.7	0.4 (+)	-0.5 (-)
UNEMPLOYMENT					
*Total Unemployment Rate (%)	4.1	3.9	4.0	(-)	(-)
Average Weekly Initial Claims	6,517	5,716	5,511	14.0 (-)	18.3 (-)
Average Weekly Insured Unemployment Rate (%)	0.9	0.8	0.8	(-)	(-)
Unemployment Insurance Final Payments	1,803	1,545	1,653	16.7 (-)	9.1 (-)
MANUFACTURING PRODUCTION WORKERS					
*Average Weekly Hours	41.2	41.1	40.7	0.2 (+)	1.2 (+)
*Average Manhours (000)	13,430.7	13,376.7	13,281.8	0.4 (+)	1.1 (+)
*Average Hourly Earnings (\$)	9.48	9.40	9.23	0.9 (+)	2.7 (+)
*Average Weekly Earnings (\$)	390.63	386.81	374.85	1.0 (+)	4.2 (+)
BUSINESS					
New Business Incorporations	1,672	1,524	1,636	9.7 (+)	2.2 (+)
Valuation of Building Permits -18 Cities (\$M)	165.9	165.2	178.0	0.4 (+)	-6.8 (-)
New Vehicle Registrations	30,949	39,023	38,494	-20.7 (-)	-19.6 (-)
Electrical Power Sales (M of KWH)	4,157.4	3,933.1	3,827.8	5.7 (+)	8.6 (+)
Taxable Retail Sales (\$M)	3,273.1	3,576.2	3,396.7	-8.5 (-)	-3.6 (-)

				Percent & (Direction**) of Change	
DATA SUMMARY					
OCTOBER 1988	Oct.	Sep.	Oct.	Sep. '88-	Oct. '87-
(SEASONALLY ADJUSTED DATA)	1988	1988	1987	Oct. '88	Oct. '88
EMPLOYMENT					
*Nonagricultural Wage & Salary Employment (000)	2,807.4	2,799.6	2,700.4	0.3 (+)	4.0 (+)
*Manufacturing Employment (000)	426.2	426.0	428.2	0.0 (0)	-0.5 (-)
UNEMPLOYMENT					
*Total Unemployment Rate (%)	3.9	4.4	4.3	(+)	(+)
Average Weekly Initial Claims	5,716	5,390	4,751	6.0 (-)	20.3 (-)
Average Weekly Insured Unemployment Rate (%)	0.8	0.9	0.8	(+)	(0)
Unemployment Insurance Final Payments	1,545	1,772	1,626	-12.8 (+)	-5.0 (+)
MANUFACTURING PRODUCTION WORKERS					
*Average Weekly Hours	41.1	41.1	41.4	0.0 (0)	-0.7 (-)
*Average Manhours (000)	13,376.7	13,383.1	13,515.3	-0.0 (0)	-1.0 (-)
*Average Hourly Earnings (\$)	9.40	9.34	9.22	0.6 (+)	2.0 (+)
*Average Weekly Earnings (\$)	386.81	384.76	382.15	0.5 (+)	1.2 (+)
BUSINESS					
New Business Incorporations	1,524	1,724	1,573	-11.6 (-)	-3.1 (-)
Valuation of Building Permits -18 Cities (\$M)	165.2	235.3	141.0	-29.8 (-)	17.2 (+)
New Vehicle Registrations	39,023	35,816	36,159	9.0 (+)	7.9 (+)
Electrical Power Sales (M of KWH)	3,933.1	4,085.7	3,855.6	-3.7 (-)	2.0 (+)
Taxable Retail Sales (\$M)	3,576.2	3,784.6	3,226.5	-5.5 (-)	10.8 (+)

* Revised to First Quarter 1988 benchmarks

** + = Favorable, - = Not Favorable, 0 = No Change (less than .05%)

THE VIRGINIA LEADING AND COINCIDENT INDEXES

Month	Leading Index (1977=100)	Monthly Percent Change	Quarterly Percent Change	Coincident Index (1977=100)	Monthly Percent Change	Quarterly Percent Change
January, 1987	158.0	+0.8		139.1	-0.8	
February	158.7	+0.4	+0.5	141.3	+1.6	+1.6
March	159.9	+0.8		142.0	+0.5	
April	160.4	+0.3		143.3	+0.9	
May	162.1	+1.1	+1.6	143.5	+0.1	+2.4
June	161.8	-0.2		145.8	+1.6	
July	163.9	+1.3		148.3	+1.7	
August	164.9	+0.6	+2.2	146.7	-1.1	+2.4
September	166.2	+0.8		148.1	+1.0	
October	167.4	+0.7		147.7	-0.3	
November	167.9	+0.3	+1.7	148.8	+0.7	+0.3
December	168.0	+0.1		148.0	-0.5	
January, 1988	165.9	-1.2		150.0	+1.4	
February	166.1	+0.1	-1.0	152.3	+1.5	+2.1
March	166.3	+0.1		151.4	-0.6	
April	167.3	+0.6		152.6	+0.8	
May	167.6	+0.2	+1.1	152.9	+0.2	+1.4
June	169.1	+0.9		154.6	+1.1	
July	170.4	+0.8		158.0	+2.2	
August	170.2	-0.1	+1.6	160.4	+1.5	+3.8
September	171.4	+0.7		159.1	-0.8	
October	173.0	+0.9		160.0	+0.6	
November	173.2	+0.1	+1.4	160.7	+0.4	+1.1
December	173.0	-0.1		162.2	+0.9	

Leading Index Components: Average Weekly Hours for Production Workers, 5-month moving average; New Businesses, 6-month moving average; Building Permits, deflated to 1982 dollars, 6-month moving average; Average Weekly Initial Claims, 3-month moving average. Coincident Index Components: Personal Income Less Transfer Payments, deflated to 1982 dollars; Industrial Production Index; Nonagricultural Wage and Salary Employment; Taxable Retail Sales, deflated to 1967 dollars by the Consumer Price Index, 6-month moving average. Sources include the WEFA Group for Industrial Production and most recent Personal Income, and the U.S. Dept. of Commerce for Personal Income. All components seasonally adjusted.

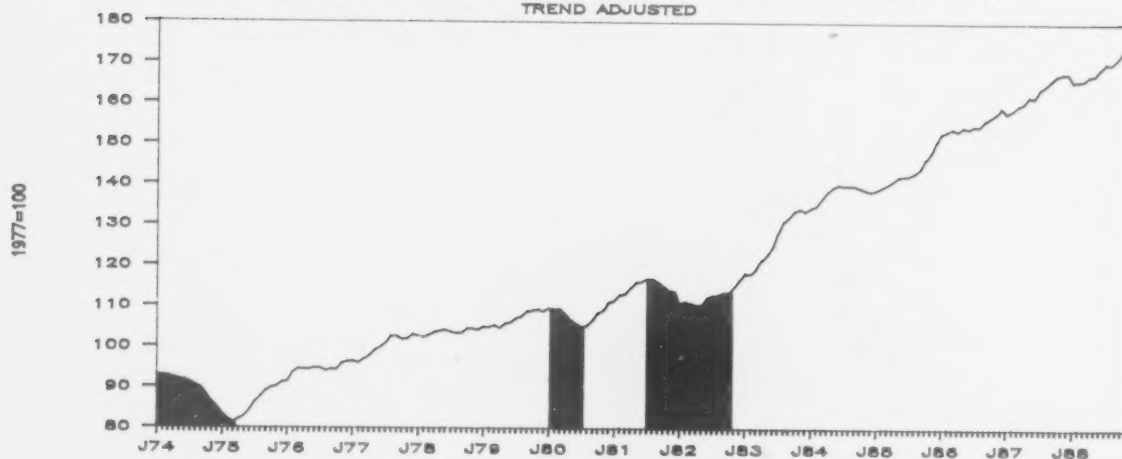
Quarter	Total Personal Income Millions	Transfer Payments Millions	Real Personal Income (\$82) Millions	Transfer Payments (\$82) Millions
1st Qtr, 1987	\$94,141	\$12,133	\$80,600	\$10,390
2nd Qtr	96,270	12,336	81,300	10,440
3rd Qtr	98,524	12,485	82,400	10,440
4th Qtr	101,124	12,628	83,200	10,390
1st Qtr, 1988	102,045	13,075	83,500	10,700
2nd Qtr	104,706	13,222	84,600	10,690
3rd Qtr	107,336	13,340	85,800	10,670
4th Qtr	109,085	13,558	87,300	10,840

Notes: All personal income data reflects seasonally adjusted annual rates.

Sources include The WEFA Group and the Bureau of Economic Analysis, U.S. Department of Commerce.

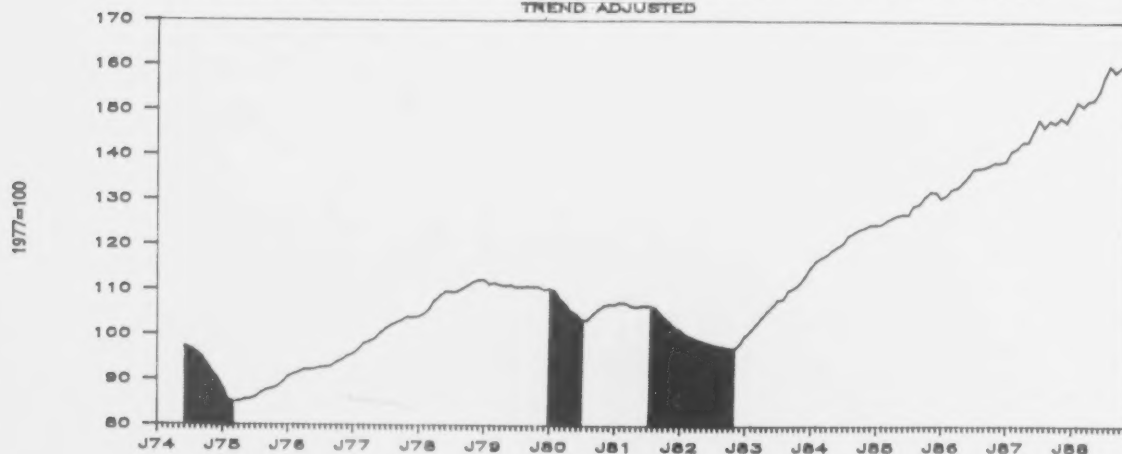
VIRGINIA INDEX OF LEADING INDICATORS

TREND ADJUSTED



VIRGINIA INDEX OF COINCIDENT INDICATORS

TREND ADJUSTED



A REVIEW OF NONAGRICULTURAL EMPLOYMENT'S PERFORMANCE IN VIRGINIA IN 1988
AND
SUMMARY EMPLOYMENT FORECASTS FOR 1989-1991

1988 in Review

Nonagricultural wage and salary employment, one of the 15 series used regularly in this publication to measure the Virginia economy, is annually revised to new benchmarks (unemployment compensation employer tax records) in the first quarter of the calendar year. The accompanying table on page 17 shows a comparison of revised 1988 nonfarm annual averages on the new benchmark basis to the 1987 nonfarm averages. The benchmark revisions show nonagricultural employment in 1988 grew 3.7 percent or an impressive 100,200 increase in the number of new jobs for Virginians. The U. S. nonfarm sector grew 3.6 percent in 1988.

Six of the eight major employing divisions--construction, transportation, trade, finance, services, and government--reached never-before-attained high levels at some point during 1988. These six divisions also had annual averages for 1988 that were above all previous recorded annual averages.

Of the major divisions, services grew the fastest in 1988, both on a percentage (+6.8 percent) and a numerical (+42,400) basis. The service expansion was fueled by rapid growth in business services (+7.6 percent), personal services (+6.9 percent), and health services (+5.9 percent). The second fastest grower in 1988 was construction, up by 6.7 percent or 12,200 as the building boom in Virginia continued unabated for the third straight year. Growth in finance, up 4.7 percent or 6,800 jobs, was fueled in part by the high level of building activities as banking institutions increased employment 7.8 percent and real estate brokers and agents added 4.5 percent more workers.

Wholesale and retail trade, Virginia's second largest employing division behind services, grew 3.9 percent last year for a gain of 23,600 jobs. Good increases were recorded in most sectors, including general merchandise, food, department stores, and restaurants. Total government grew 2.6 percent or 13,800 jobs with most gains being in the local education sector. Transportation-utilities added workers at the rate of 2.1 percent with 3,000 jobs being created. Half of this growth was at air carriers where employment was 7.3 percent higher.

In 1988 manufacturing employment at 427,300 averaged 0.4 percent or 1,600 jobs below its 1987 level. The slightly smaller numbers this year could generally be traced to an overall shortage of production workers, some plants being at capacity levels, and some style/inventory problems in textiles and apparel. In 1987 the fall in the value of the U. S. dollar benefited nondurable goods producers such as textiles, chemicals, and plastics. In 1988 it was durable goods' turn to benefit from improved export demand. Durable goods employment was up 1.5 percent or 3,000 jobs.

Expanded export markets upped employment in machinery (+19.4 percent), instruments (+15.4 percent), and primary metals (+0.9 percent). Defense orders boosted transportation equipment 4.5 percent, and at 44,500 this industry again replaced textiles as Virginia's largest manufacturing industry. For the past several years, transportation equipment and textiles have been vying back and forth for the number one manufacturing spot. Stone-clay-glass (+2.5 percent) and lumber (+0.8 percent) benefited from the continuing building

EMPLOYMENT IN NONAGRICULTURAL INDUSTRIES IN VIRGINIA
ANNUAL AVERAGES (In Thousands)
Revised to First Quarter 1988 Benchmarks

	1988	1987	Change 1987-1988	% Change 1987-1988
TOTAL NONAGRICULTURAL	2,780.6	2,680.4	+100.2	+ 3.7
MANUFACTURING	427.3	428.9	- 1.6	- 0.4
Durable Goods	205.7	202.7	+ 3.0	+ 1.5
Lumber & Wood Products	25.8	25.6	+ 0.2	+ 0.8
Furniture & Fixtures	24.1	24.8	- 0.7	- 2.8
Stone, Clay, & Glass Products	16.2	15.8	+ 0.4	+ 2.5
Primary Metal Industries	10.9	10.8	+ 0.1	+ 0.9
Fabricated Metal Products	18.6	18.8	- 0.2	- 1.1
Machinery (except Electrical)	19.7	16.5	+ 3.2	+19.4
Electric & Electronic Equipment	36.8	39.3	- 2.5	- 6.4
Transportation Equipment	44.5	42.6	+ 1.9	+ 4.5
Instruments & Related Products	6.0	5.2	+ 0.8	+15.4
Misc. Manufacturing Industries	3.2	3.3	- 0.1	- 3.0
Nondurable Goods	221.6	226.2	- 4.6	- 2.0
Food & Kindred Products	37.1	38.4	- 1.3	- 3.4
Tobacco Manufactures	13.1	13.4	- 0.3	- 2.2
Textile Mill Products	42.1	44.4	- 2.3	- 5.2
Apparel & Other Textile Products	28.8	29.9	- 1.1	- 3.7
Paper	15.6	15.7	- 0.1	- 0.6
Printing & Publishing	34.7	33.0	+ 1.7	+ 5.2
Chemicals & Allied Products	32.6	33.2	- 0.6	- 1.8
Petroleum, Rubber, & Misc.	16.9	16.6	+ 0.3	+ 1.8
Leather & Leather Products	.7	1.7	- 1.0	-58.8
MINING	15.9	15.9	0.0	0.0
CONSTRUCTION	195.1	182.9	+ 12.2	+ 6.7
TRANSPORTATION & PUBLIC UTILITIES	145.6	142.6	+ 3.0	+ 2.1
Railroad Transportation	10.0	10.7	- 0.7	- 0.7
Trucking & Warehousing	35.0	34.0	+ 1.0	+ 2.9
Transportation by Air	22.2	20.7	+ 1.5	+ 7.3
Communication	41.2	40.7	+ 0.5	+ 1.2
Electric, Gas, & Sanitary Service	21.2	21.0	+ 0.2	+ 1.0
WHOLESALE & RETAIL TRADE	633.8	610.2	+ 23.6	+ 3.9
Wholesale Trade	131.2	128.2	+ 3.0	+ 2.3
Retail Trade	502.6	482.0	+ 20.6	+ 4.3
FINANCE, INSURANCE, & REAL ESTATE	150.4	143.6	+ 6.8	+ 4.7
Banking	39.9	37.0	+ 2.9	+ 7.8
Insurance Carriers	26.3	25.3	+ 1.0	+ 4.0
Real Estate	37.3	35.7	+ 1.6	+ 4.5
SERVICES	668.5	626.1	+ 42.4	+ 6.8
Personal Services	35.5	33.2	+ 2.3	+ 6.9
Business Services	184.2	171.2	+ 13.0	+ 7.6
Health Services	147.8	139.6	+ 8.2	+ 5.9
GOVERNMENT	544.1	530.3	+ 13.8	+ 2.6
Federal Government	171.0	170.3	+ 0.7	+ 0.4
State & Local Government	373.1	360.0	+ 13.1	+ 3.6

boom. Electric equipment sustained the only significant durable goods loss (-6.4 percent) as nationwide cutbacks occurred in communications equipment.

Nondurable goods employment was -2.0 percent or 4,600 jobs below 1987. Textiles (-5.2 percent), especially knit goods, had some inventory problems last summer, and shifting consumer style preferences for denim goods reduced apparel employment by 3.7 percent. The closing of the State's major leather goods producer in late 1987 reduced employment in that small industry by 58.8 percent in 1988. Strong demand for printed materials upped employment in printing and publishing by 5.2 percent. Other nondurable changes were minor.

Employment in Virginia's long-suffering mining industry averaged the same as last year at 15,900 jobs and coal production actually increased by 9.3 percent. This followed five consecutive years of decline, over which time employment fell 28 percent.

Summary Forecast for 1989-1991

The latest forecasts for Virginia project a slowdown in growth after mid-year 1989. The State nonfarm sector should, however, continue to increase about 2.2 percent in both 1989 and 1990. As in past periods of slower

economic growth, Virginia's diversity keeps it somewhat insulated from national trends. With some further declines in the dollar, new facilities coming on line to meet export demand, and increased productivities brought about by new technologies, Virginia factories may actually show some increase in their payrolls over 1988. The State's nonmanufacturing industries might see some retrenchment from the boom growth levels of 1986, 1987, and 1988. Services and trade payrolls are each expected to increase about 3.0 percent in 1989 and 1990, but these two industries should still be the major sources numerically of new jobs. Higher interest rates are likely to cause about a one percent reduction in the number of construction jobs in 1989, but even this 190,000+ job level should surpass all previous years except 1988. The slightly slower rate of job growth over the next two years may help ease the labor shortage situations currently existing in Northern Virginia and several other very tight metropolitan area labor markets.

By 1991 the Virginia economy should be gathering momentum again with nonfarm job growth up about 2.8 percent. By then, manufacturers should be increasing payrolls at an annual rate of about 2.6 percent and services and trade jobs should be expanding close to 4.0 percent.

William F. Mezger

HISTORICAL SUMMARY

PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE

GENERAL INFORMATION

For those interested in studying the business cycle in Virginia, this publication includes several of the economic time series for which data is readily available on a monthly basis. From time to time, new series will be added and, if necessary, others presently included will be discontinued.

Business Cycle Turning Points

The shaded spaces on the charts represent the 1973-75, 1980, and 1981-82 recessions as designated by the National Bureau of Economic Research (NBER). The beginning of a recession is defined as the month when aggregate economic activity in the U. S. reaches a cyclical high, from which it begins to turn down, and the end as the month when it reaches a cyclical low, from which it begins to turn up. According to NBER, the 1973-75 recession began in November 1973 and ended in March 1975, the 1980 recession began in January 1980 and ended in July 1980, and the 1981-82 recession began in July 1981 and ended in November 1982.

Seasonal Adjustment

To correlate changes in a time series and changes in the business cycle it is

desirable to eliminate, insofar as possible, the effect of irrelevant factors from the data comprising the series. All series currently published in Indicators have been adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle.

Months for Cyclical Dominance (MCD)

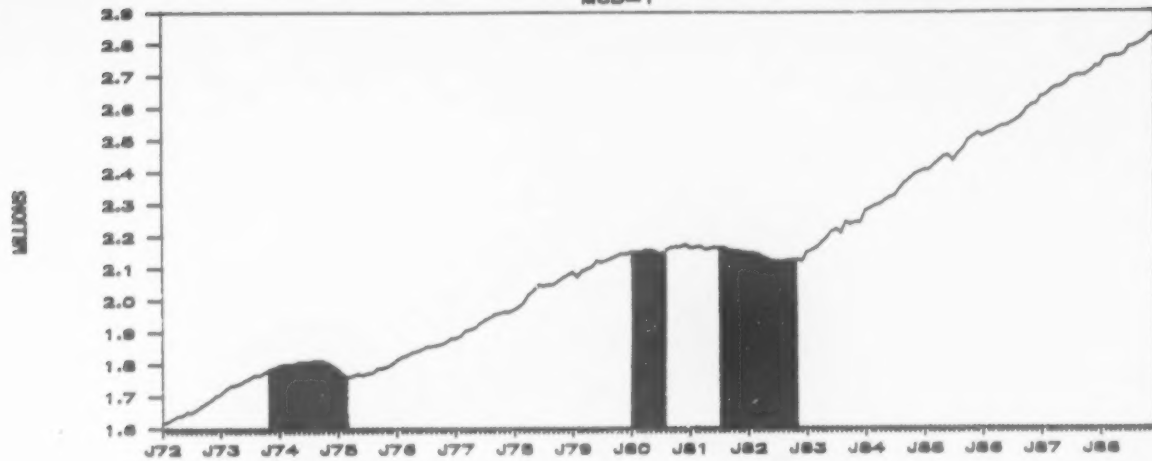
After seasonal adjustment there often remains a significant degree of purely random change, the effect of which can be minimized with a moving average equal in length to the MCD of the series. The MCD is an estimate of the length of the moving average which will reveal the cyclical pattern among the welter of random fluctuations in the data--the greater the MCD the more random and less cyclically significant are monthly changes in the series. Where noted, charts of historical data in this publication represent seasonally adjusted figures which have been averaged according to the MCD of each series.

DATA SOURCES

Nonagricultural Wage and Salary Employment.....	Virginia Employment Commission (VEC)
Manufacturing Employment.....	VEC
Total Unemployment Rate.....	VEC
Average Weekly Initial Claims.....	VEC
Insured Unemployment Rate.....	VEC
Unemployment Insurance Final Payments.....	VEC
Average Manhours.....	VEC
Average Hourly Earnings.....	VEC
Average Weekly Earnings.....	VEC
Average Workweek.....	VEC
New Business Incorporations.....	Virginia State Corporation Commission
Valuation of Building Permits - 18 Cities.....	Local Building Inspectors
New Vehicle Registrations.....	Virginia State Division of Motor Vehicles
Electrical Power Sales.....	Virginia Power, Appalachian Power Co., Delmarva Electric Co., Tennessee Power Company
Taxable Retail Sales.....	Virginia State Department of Taxation
Taxable Retail Sales/CPI.....	Virginia State Department of Taxation

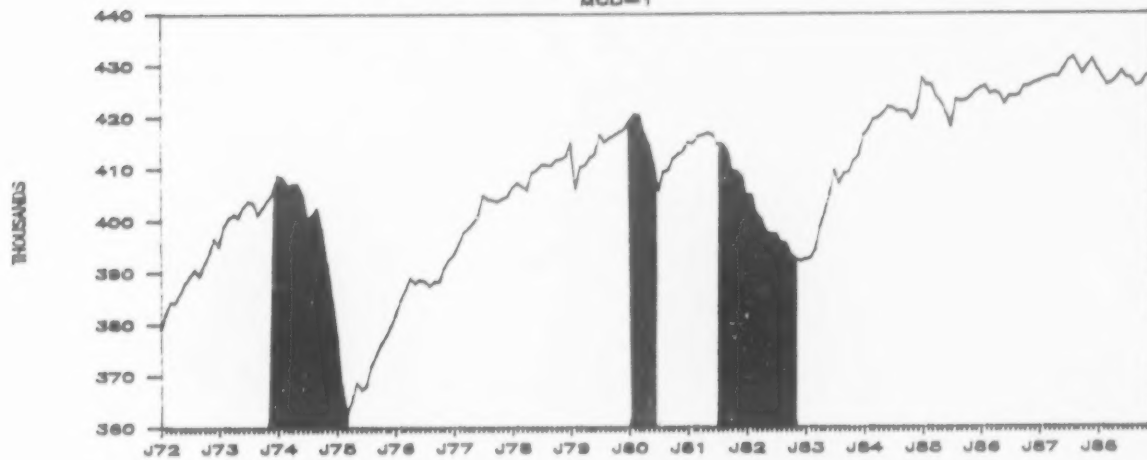
NONAG WAGE & SALARY EMPLOYMENT

MCD=1



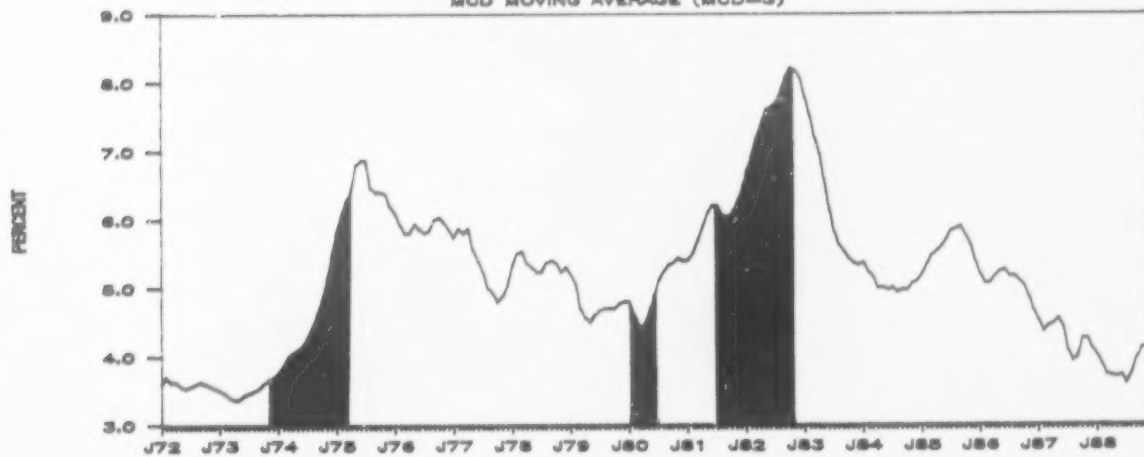
MANUFACTURING EMPLOYMENT

MCD=1

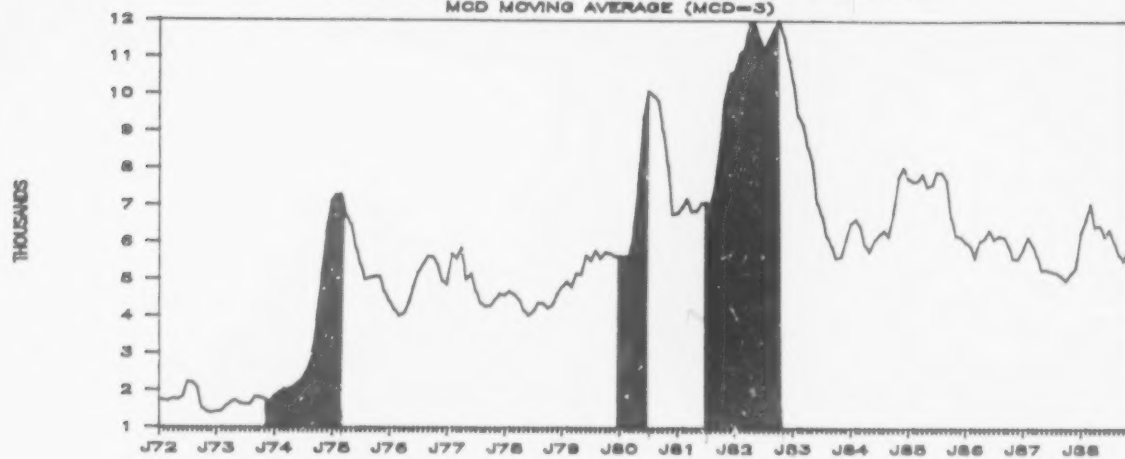


TOTAL UNEMPLOYMENT RATE

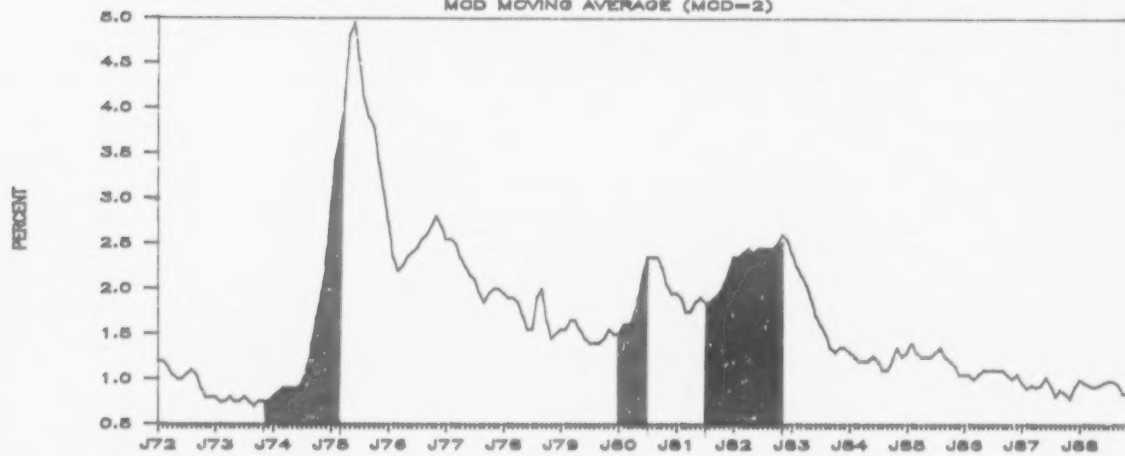
MCD MOVING AVERAGE (MCD=3)



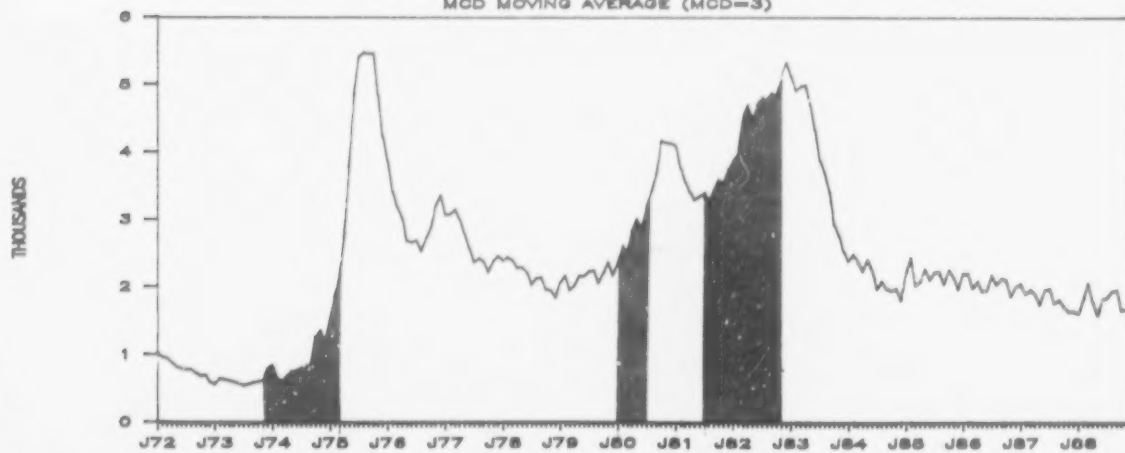
AVERAGE WEEKLY INITIAL CLAIMS
MCD MOVING AVERAGE (MCD=3)



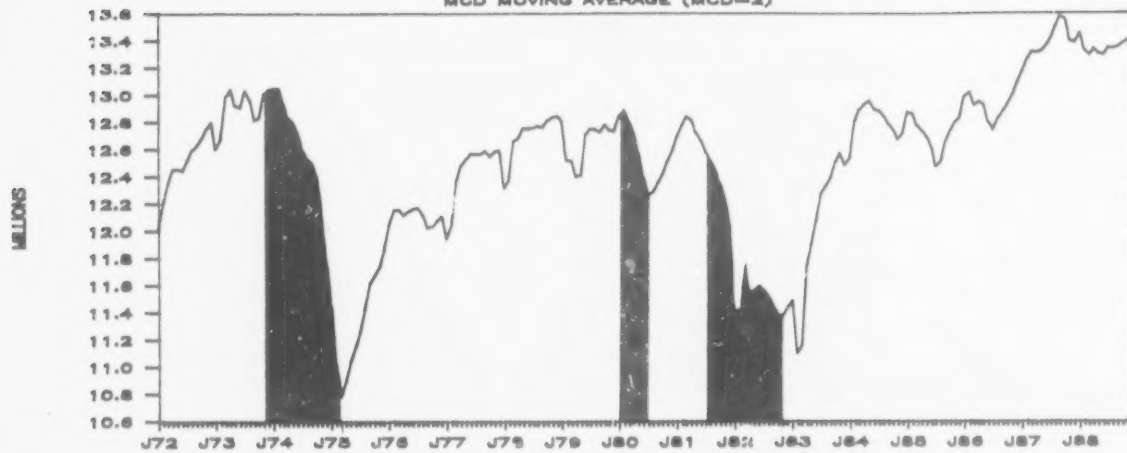
INSURED UNEMPLOYMENT RATE
MCD MOVING AVERAGE (MCD=2)



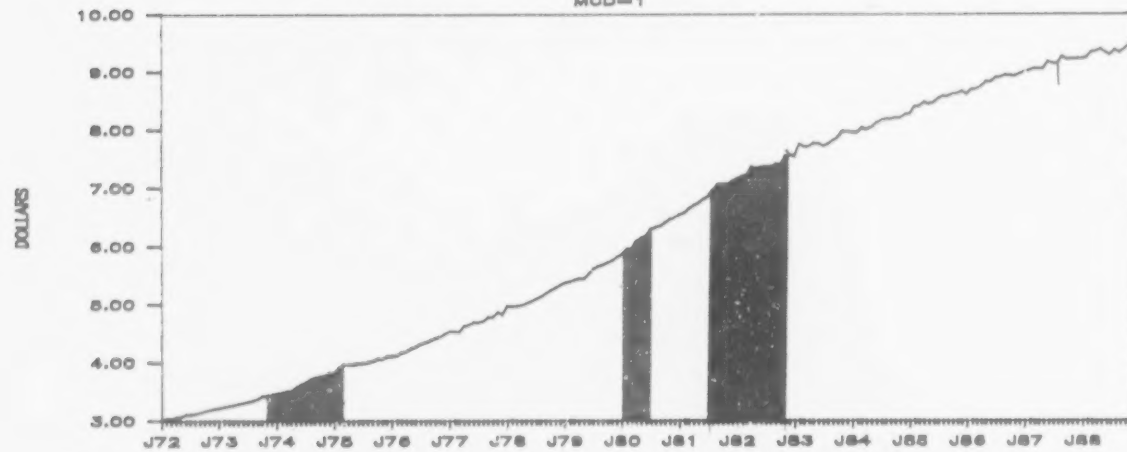
U. I. FINAL PAYMENTS
MCD MOVING AVERAGE (MCD=3)



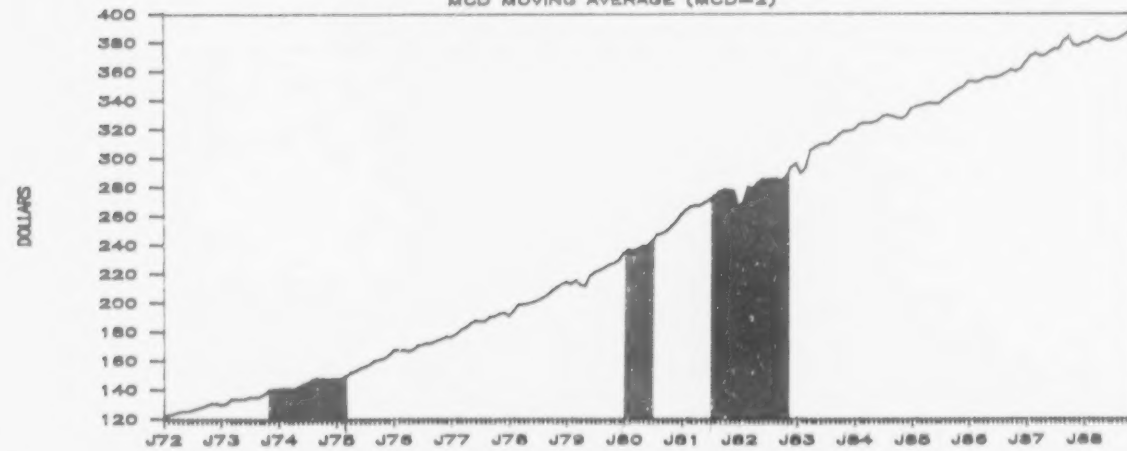
AVERAGE MANHOURS MCD MOVING AVERAGE (MCD=2)



AVERAGE HOURLY EARNINGS MCD=1

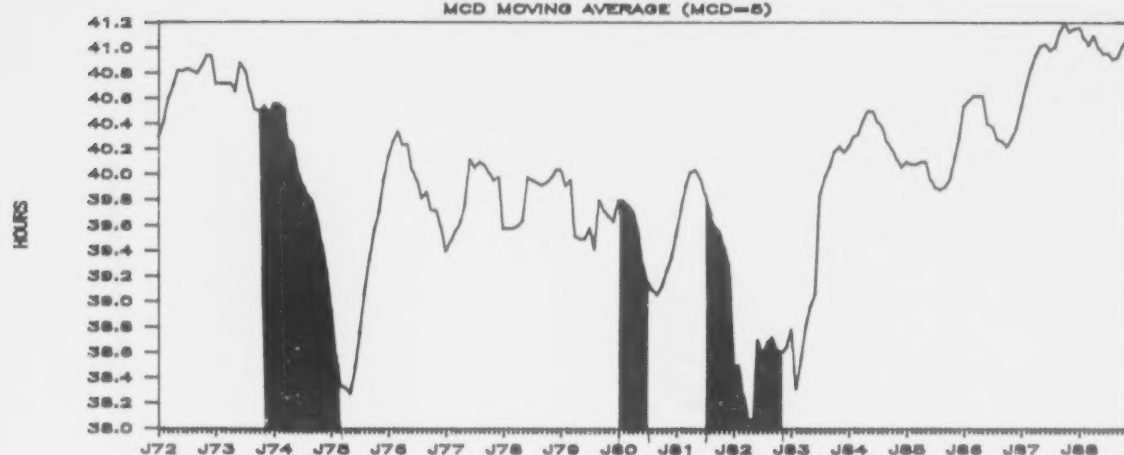


AVERAGE WEEKLY EARNINGS MCD MOVING AVERAGE (MCD=2)



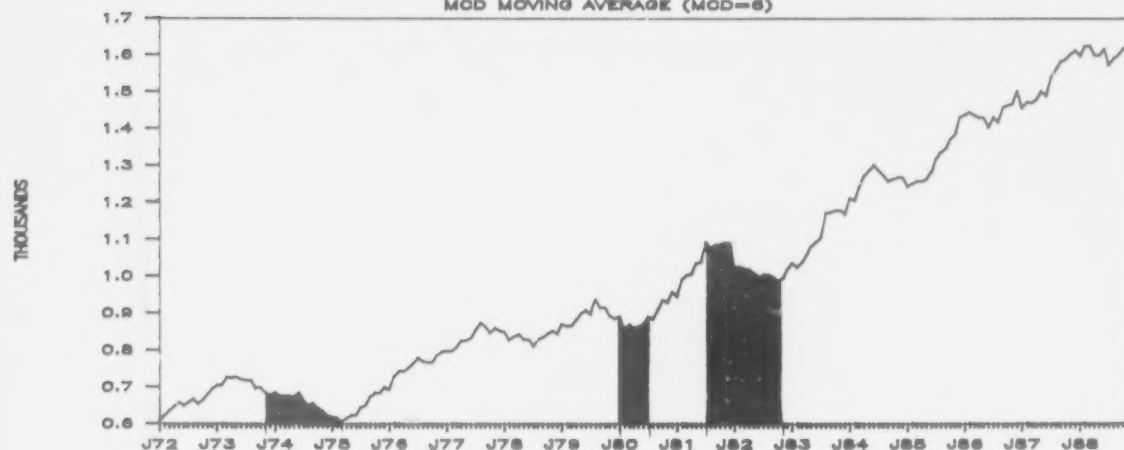
AVERAGE WORKWEEK

MCD MOVING AVERAGE (MCD=6)



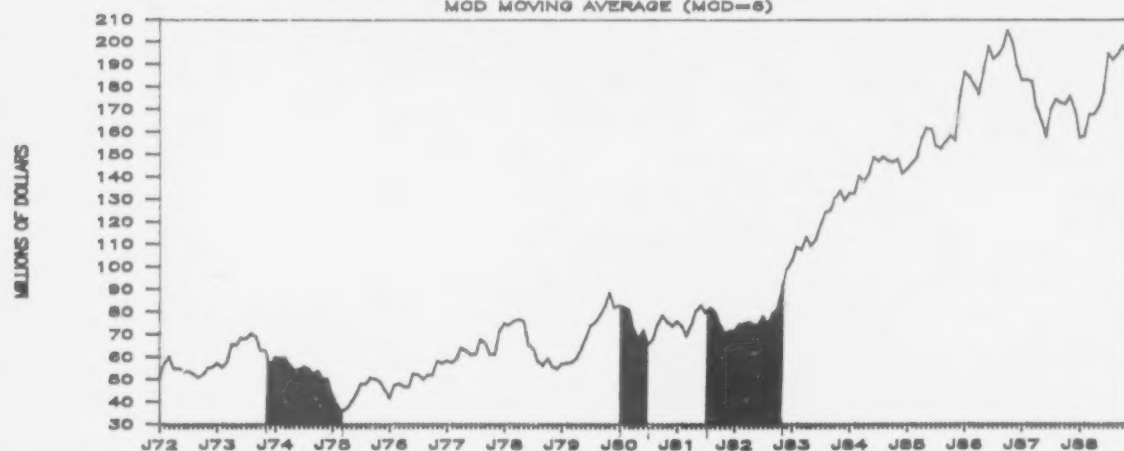
NEW BUSINESS INCORPORATIONS

MOD MOVING AVERAGE (MOD=6)



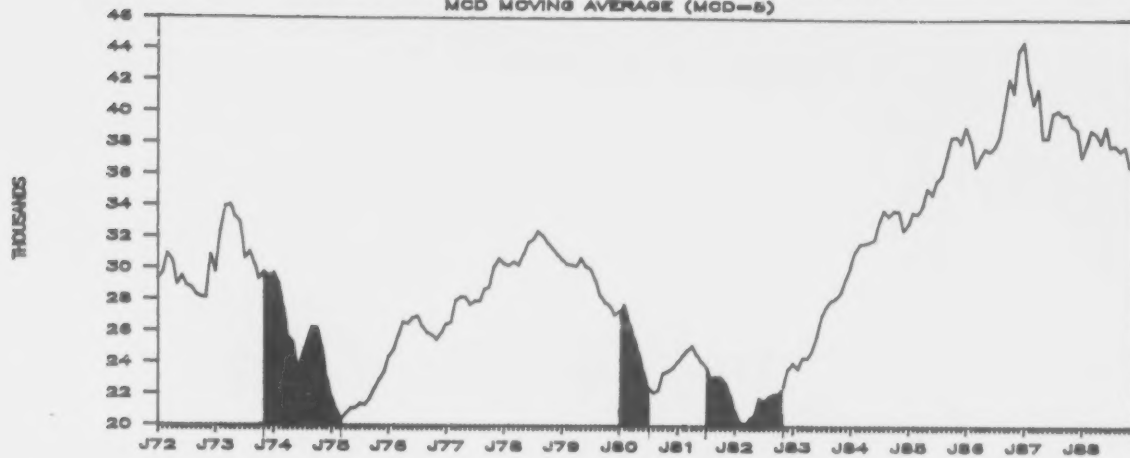
VALUATION OF BUILDING PERMITS

MOD MOVING AVERAGE (MOD=6)



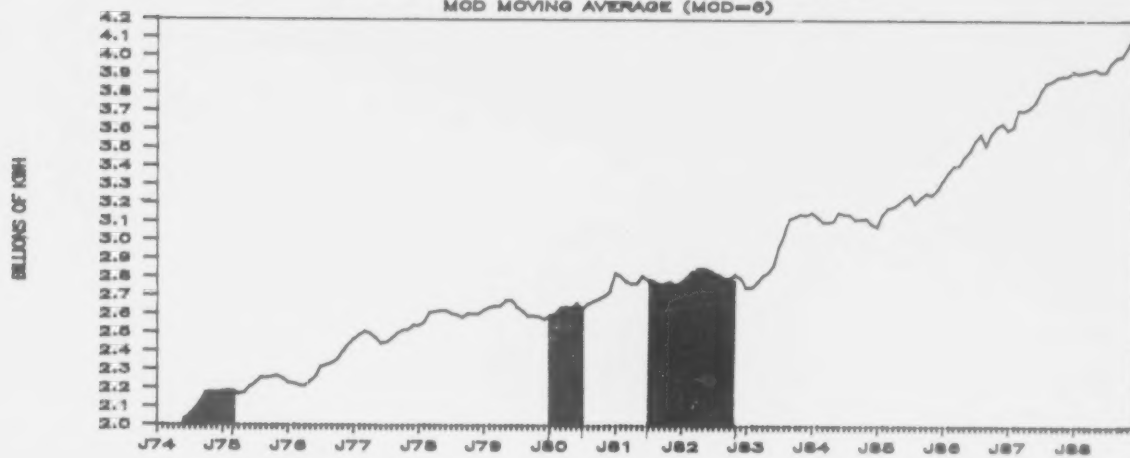
NEW VEHICLE REGISTRATIONS

MCD MOVING AVERAGE (MCD=5)



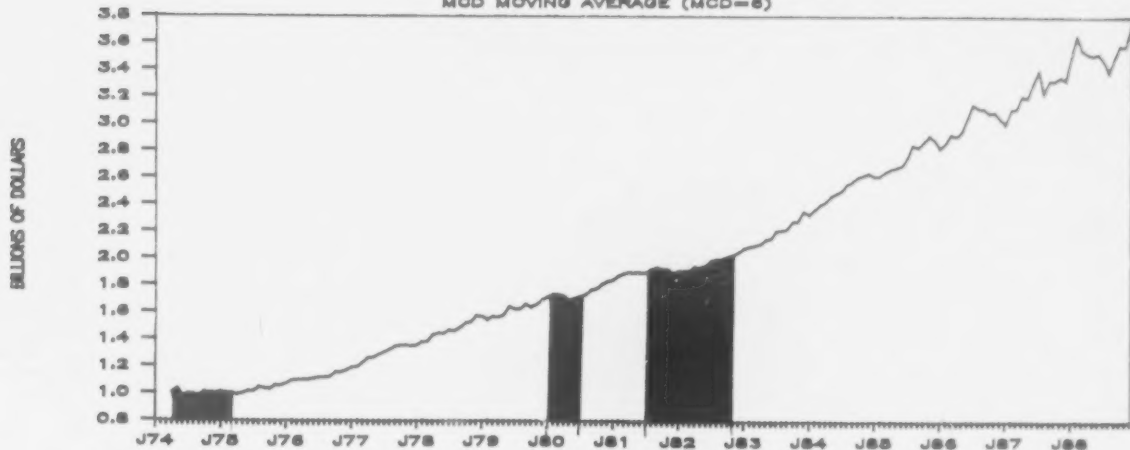
ELECTRICAL POWER SALES

MCD MOVING AVERAGE (MCD=5)



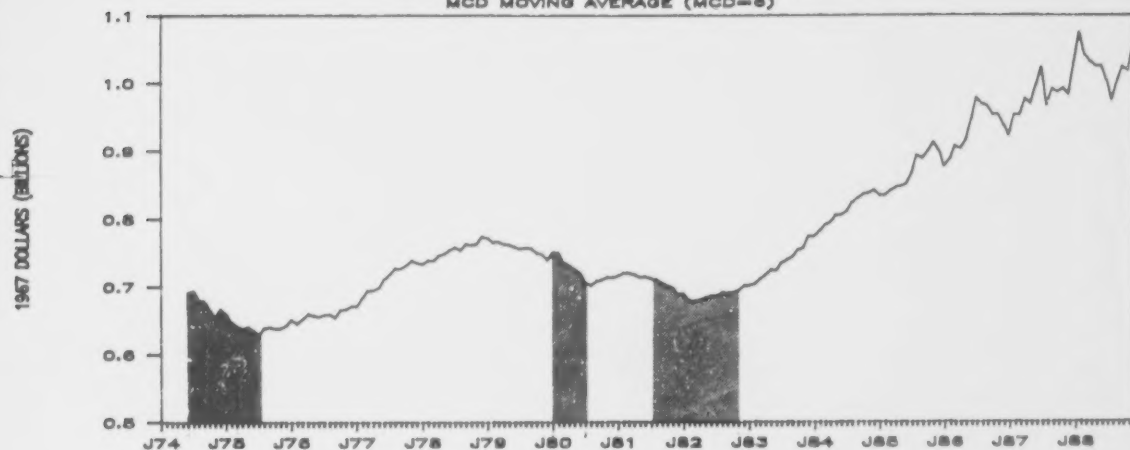
TAXABLE RETAIL SALES

MCD MOVING AVERAGE (MCD=5)



TAXABLE RETAIL SALES/CPI

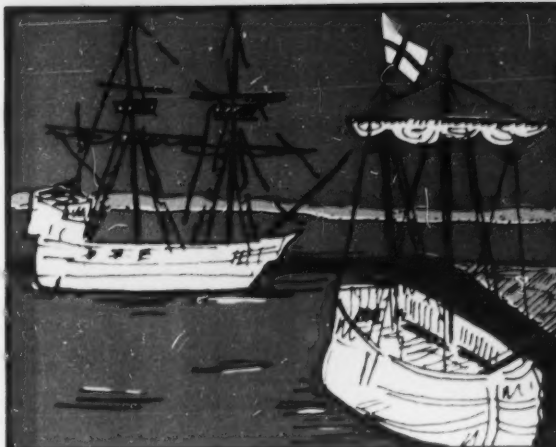
MCD MOVING AVERAGE (MCD=6)



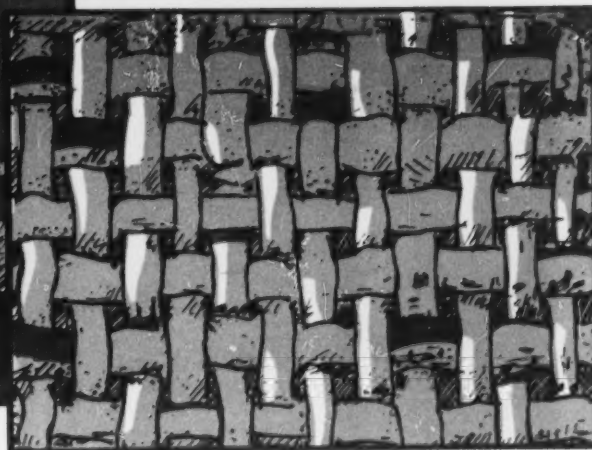
VIRGINIA ECONOMIC INDICATORS

VOL. XXI NO. 1

1st QUARTER 1989 DATA



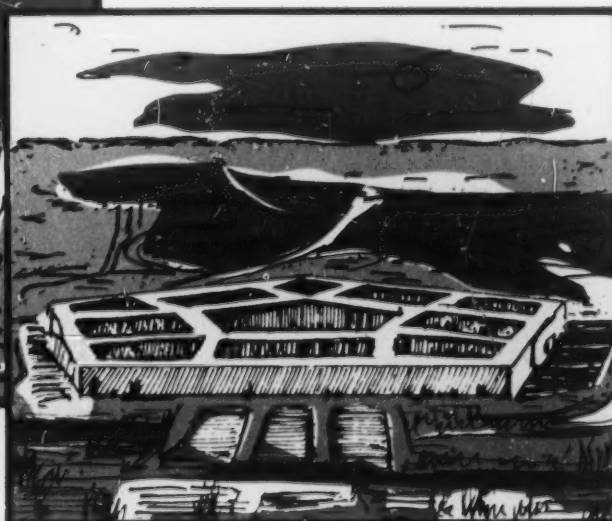
TOURISM



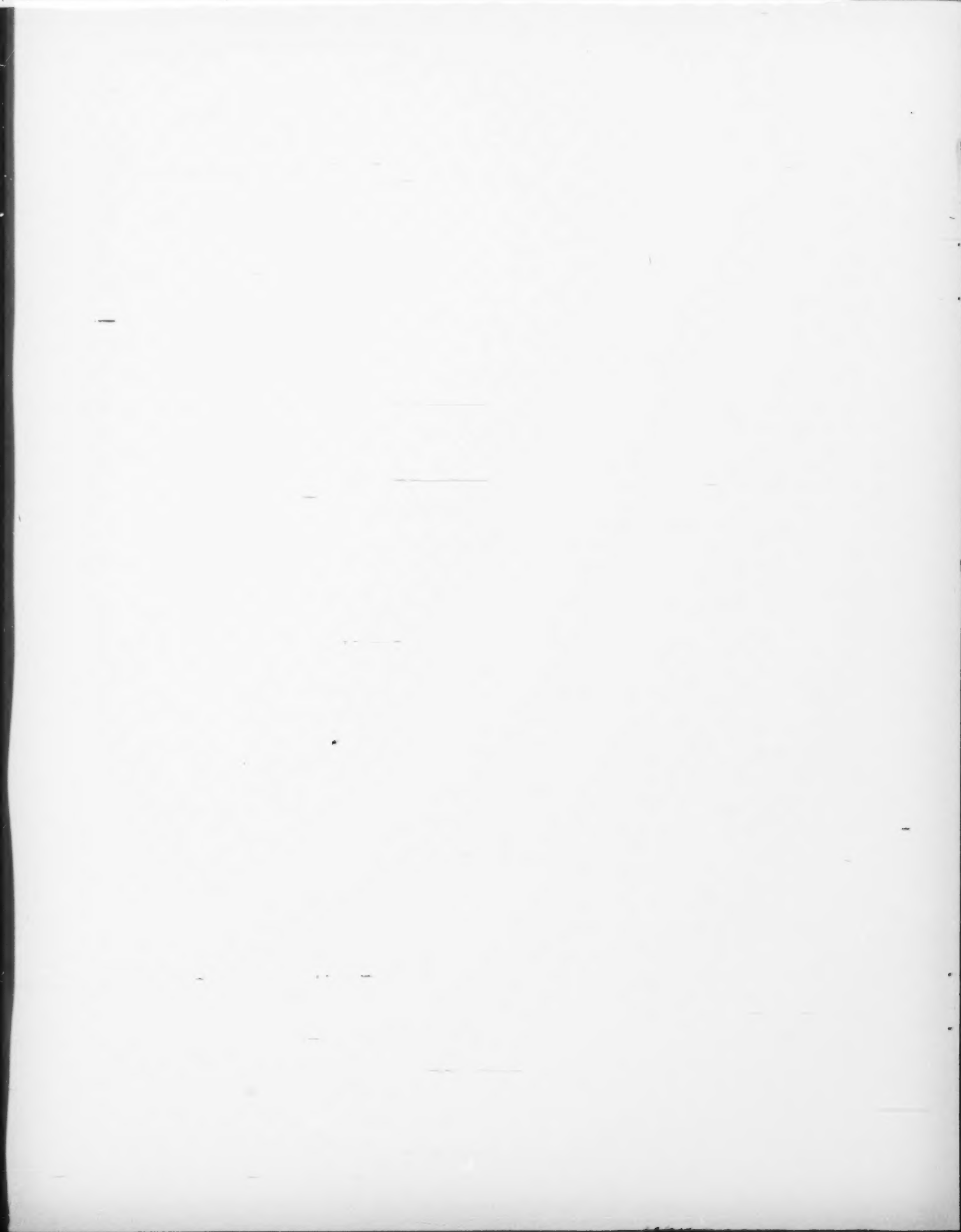
TEXTILES



TOBACCO



GOVERNMENT



FOREWORD

This publication is designed to depict the movement of Virginia's key economic indicators in graphic and tabular form with accompanying narrative analysis.

We welcome any comments, suggestions, or questions concerning Virginia Economic Indicators. Please contact Dolores A. Esser, Director, Economic Information Services Division, P. O. Box 1358, Richmond, Virginia 23211, (804) 786-7496, for additional information or explanation of the contents of this document.

Note to Virginia Economic Indicators' Readers:

In our First Quarter 1988 issue, the feature article was "An Annual Econometric Forecasting Model for Hampton Roads, Virginia" by guest writer David G. Garraty. The footnotes were inadvertently left off this article, but are available from Dr. Garraty. His address is:

Dr. David G. Garraty
Virginia Wesleyan College
Wesleyan Drive
Norfolk, VA 23502-5599

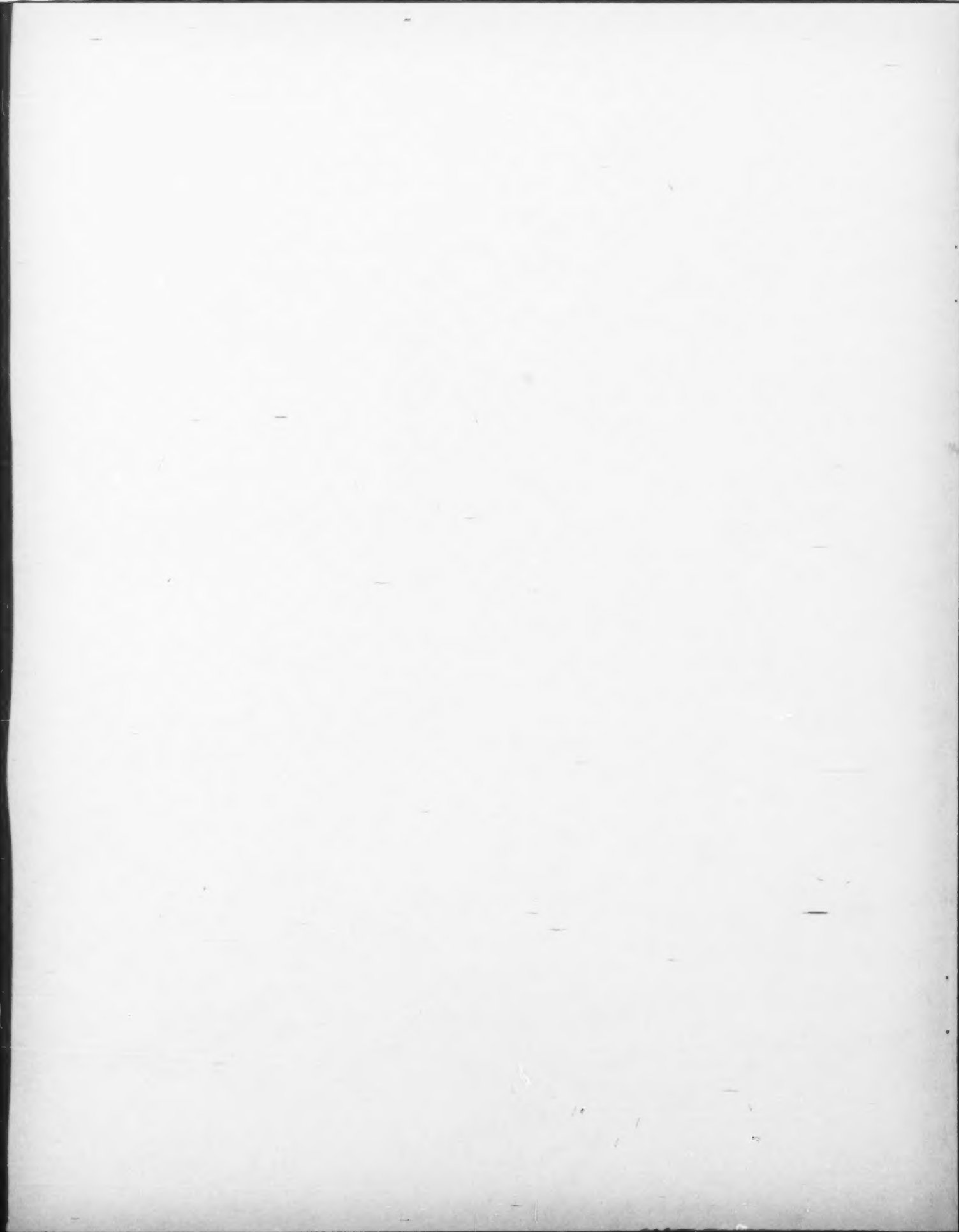


TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
FOREWORD.....	iii	o Average Manhours	
ECONOMIC OUTLOOK - U. S.....	1	o Average Weekly Earnings	
		o Deflated Average Weekly Earnings	
HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS, FIRST QUARTER 1989.....	3	BUSINESS INDICATORS, JANUARY 1988 TO MARCH 1989.....	14
VIRGINIA INDICATORS, FIRST QUARTER DATA.....	4	o New Business Incorporations	
EMPLOYMENT INDICATORS, JANUARY 1988 TO MARCH 1989.....	6	o Valuation of Building Permits	
o Nonagricultural Wage & Salary Employment		o New Vehicle Registrations	
o Manufacturing Employment		BUSINESS INDICATORS (Continued)	
o Total Unemployment Rate		JANUARY 1988 to MARCH 1989.....	16
UNEMPLOYMENT INSURANCE INDICATORS, JANUARY 1988 TO MARCH 1989.....	8	o Electrical Power Sales	
o Average Weekly Initial Claims—		o Taxable Retail Sales	
o Average Weekly Insured Unemployment (Percent)		o Value of Exports	
o U. I. Final Payments		DATA SUMMARY, MARCH 1989.....	18
MANUFACTURING PRODUCTION WORKER INDICATORS, JANUARY 1988 TO MARCH 1989.....	10	SUMMARY: MOVEMENT OF INDICATORS, JANUARY 1988 TO MARCH 1989.....	18
o Average Weekly Hours		DATA SUMMARY, JANUARY AND FEBRUARY 1989.....	19
o Average Hourly Earnings		THE VIRGINIA LEADING AND COINCIDENT INDEXES.....	20
o Deflated Average Hourly Earnings		GOOD JOBS, BAD JOBS.....	22
PRODUCTION WORKER INDICATORS (Continued), JANUARY 1988 TO MARCH 1989.....	12	HISTORICAL SUMMARY, PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE.....	25

ECONOMIC OUTLOOK - U. S.

VOL. XXI, NO. 1

FIRST QUARTER DATA

Forecast Update

- o Hope rises for a small downward adjustment in inflation.
 - Domestic demand weakened as nonfarm employment nationally grew at only 1.8 percent with domestic demand contributing little to growth.
 - Real retail sales have been off since January.
 - Housing starts were at the lowest level since December 1982.
 - Industrial production rose at 3.0 percent in First Quarter 1989--one-half the rate of the second half of 1988. Capacity utilization in the early stages of processing has fallen.
 - National job growth continued to slow and unemployment moved up a notch from its low point of 5.0 percent.
 - The initial supply shock to oil prices caused by the Alaskan oil spill and the North Sea explosion have begun to wear off. The passthrough of higher gasoline prices will keep inflation at the consumer level high for a couple more months, but inflation should fall below 5 percent by Third Quarter 1989.
- o The balance of trade continues to improve with exports growing over 15 percent in First Quarter 1989 and the merchandise trade deficit shrinking to 8.9 billion in March.
- o The above good news, a somewhat higher personal savings rate, and a windfall federal tax increase have combined to hearten financial markets. The dollar has risen and interest rates have eased!
- o Reasons behind the dollar's ascent:
 - The perception by foreign investors that U. S. interest rates have peaked drew large sums to U. S. capital markets in expectation of capital gains.
 - In early 1989, Japanese institutional investors have poured largely unhedged funds into the U. S. in the belief the dollar has little downside potential left.
 - Demand for dollars for trade transactions and capital investments has increased. Higher oil prices require more dollars.
 - Political uncertainties in both Japan and Germany also made the dollar look safer.

o The above renewed demand for dollars materialized at the same time that a relative shortage of dollars in world markets emerged.

o With the new strength in the dollar, the Federal Reserve Open Market Committee no longer desires to further-tighten monetary policy and a neutral stance has been assumed. There might even be a slight monetary easing in the near future. The Fed, however, will

likely put the brakes back on if real growth exceeds 2.0-2.5 percent later this year or inflation again picks up.

o Has the expected period of slower growth really started or will the economy speed back up now that the Fed has momentarily lifted its foot off the brake? The path of the dollar and interest rates in the next few months will determine whether the economy lands with a bounce in 1989 or more of a thud in 1990.

William F. Mezger

HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS FIRST QUARTER 1989

o During First Quarter 1989, four Virginia economic indicator series set all-time records.

- Nonagricultural wage and salary employment set new records of 2,854,900 in January and 2,873,200 in February.

- Average hourly earnings reached a new high of \$9.53 per hour in March.

- New business incorporations soared to a new high of 1,904 in March as confidence in the Virginia economy remained high.

- Electric power sales topped 4,355.9 million kilowatt hours in March.

o Four other series exhibited their best performances in some time.

- Initial claims for unemployment insurance fell to 4,550 in February, the best level in 11 years.

- Factory employment at 430,000 in January was at the highest level since December 1987.

- Average manhours worked at 13,454,200 in January were the highest since October 1987.

- The average workweek at 41.2 hours in January was the longest since December 1987.

o The Consumer Price Index for All Urban Consumers (CPI-U) averaged 121.7 (1982-4 = 100) in First

Quarter 1989. This was 1.2 percent higher than the 120.3 average of Fourth Quarter 1988. The First Quarter 1989 average was 4.8 percent higher than the First Quarter 1988 average. This compared to a 4.0 percent first quarter to first quarter rise between 1987 and 1988.

o According to the Bureau of Labor Statistics (BLS) of the U. S. Department of Labor, productivity increased at a 3.5 percent annual rate during First Quarter 1989 in the business sector, as output rose 6.7 percent and hours of all persons engaged in the sector increased 3.1 percent (seasonally adjusted annual rates). During Fourth Quarter 1988, productivity declined 1.0 percent, as output grew 3.3 percent and hours increased 4.3 percent. The large productivity gain in First Quarter 1989--the largest in a year--partly reflected a very large increase in farm productivity.

o According to the Virginia Division of Tourism, the State experienced its best year for travel in 1988. Travelers in Virginia spent \$7.1 billion last year, an increase of \$233 million over the 1987 total. Tourism generated \$376 million in State and local taxes in 1988.

o Virginia coal shipments through February 1989 were up 12 percent compared to the first two months of 1988. Virginia shipments were up because of continued international demand for the State's high-grade metallurgical coal and the economic upturn in Europe and Japan.

VIRGINIA INDICATORS FIRST QUARTER DATA

The performance of the fifteen series used to measure the Virginia economy was generally weaker in the first quarter than it has been in recent quarters, and this performance seemed to deteriorate as the quarter wore on. January had ten series positive and five negative. February was the reverse with only five up and ten down. March slid a little more with four series positive, ten negative, and one unchanged. While there seemed to be some clear signs of slower growth emerging nationally (see Economic Outlook - U. S. on page 1 of this issue), much of Virginia's spotty first quarter performance seemed to be due largely to abnormal weather patterns with a mild, dry January, a cold, wet March and lots of snow in Eastern Virginia.

The unusual weather pattern seemed to have thrown the indicator series off more than could be compensated for by the seasonal adjustment factors. The mild January caused higher than usual employment levels and fewer unemployment compensation transactions, but electric utilities sold much less current for heating than usual. As the weather deteriorated after mid-February, the frequent storms curtailed employment, sharply increased unemployment insurance transactions, reduced work hours, and kept shoppers home while at the same time increasing electric power usage. These reversed weather patterns appear to account for the indicators first quarter fall off in performance more than a slowing of the economy. Preliminary data for April and May indicates the Virginia economy, especially pertaining to the employment-related series, is still very strong indeed.

Even with this quarter's less than spectacular overall showing, four series still set new records. Nonagricultural wage and salary employment set new records of 2,854,900 in January and 2,873,200 in February. Average hourly earnings reached a new record of \$9.53 per hour, new business incorporations soared to a new high of 1,904, and electric power sales topped 4,355.9 million kilowatt hours, all in March. Initial claims for unemployment insurance fell to 4,550 in February, the best level in 11 years. Three other factory-related series in January performed the best in a number of months. Factory employment rolls at 430,000 were the highest since December 1987, average manhours worked at 13,454,200 were the highest since October 1987, and the average workweek at 41.2 hours was the longest since December 1987.

The six-month moving average of rising indicators (page 18) serves to illustrate the quarter's performance. The moving average enhances analysis because it smoothes out much of the irregularity present in many of the individual series.

New Items Added

In this issue the series have been recomputed incorporating 1988 data into the seasonal adjustment factors, as is usually done at this time of year. For some time we have shown taxable retail sales in Virginia adjusted by the Consumer Price Index to constant dollars in the Historical Summary tables in the back of the book. Starting with this issue, we have also added constant price

figures for taxable retail sales to the data tables and graphs in the front of the book. For the first time we are showing CPI adjusted data to constant dollars in both places for average hourly earnings and average weekly earnings in addition to the current dollar values. To further facilitate your study of the Virginia economy, with this issue, we are also publishing the value of Virginia exports; but since this data has just become available on a current basis, we as yet have no back data with which to seasonally adjust a time series.

Unusual First Quarter Weather Affects Series

Nonagricultural wage and salary employment, which over the past several years has consistently been the strongest indicator series, forged new ground in January and February, rising to 2,854,900 and 2,873,200, respectively, before turning slightly negative on a seasonally adjusted basis in March (2,870,800). Unadjusted, the series was still positive. The March nonfarm employment figures seem to have fallen victim to the first quarter's unusual weather patterns. Seasonally adjusted factory employment at 430,000 in January rose to the highest level since December 1987, before being reduced in February (429,000) and March (428,200) by nationwide curtailments in the production of communications equipment.

The four unemployment series were largely positive in January before turning negative for the remainder of the quarter as weather-related short-term furloughs increased unemployment transactions in February and March. February, however, saw average weekly initial claims fall to 4,550, the lowest level in 11 years. January and February's unemployment final payment levels of 1,505 and 1,511, respectively, were only marginally higher than

December's 14-year low of 1,484. Final payments increased to 1,657 in March.

The production worker series turned in a weak performance after January, largely because of reduced hours, some of which were related to weather-caused work stoppages and delays. The workweek at an average of 41.2 hours in January was at a 13-month high. Average hourly earnings, after being off a penny in January, recovered in February and went on to set a new record of \$9.53 in March.

The five business-related indicators as a group in the first quarter were also slightly more negative than positive although weather again seemed to be a primary contributing factor. New business incorporations rose to 1,815 in January, second only to 1,835 in August 1988, fell to 1,541 in February, then rose to a new record of 1,904 in March. The high level of new business starts indicated there is still a lot of confidence in the economy. The dollar volume of building permits issued rose to a high \$211.2 million in January, then fell to a four-year low of \$125.9 million by March. Movement of this volatile indicator no doubt reflected the higher interest rates in the first months of 1989, although construction employment in Virginia continues to exceed all previous records. Motor vehicle registrations averaged in the moderate mid-30,000 range in the first quarter, being down in January, up a little in February, then dropping in March. The car market appears to be reaching the saturation point with even spring rebate and incentive programs being unable to produce very many extra sales. Electric power sales were off in January and February because of the relatively mild weather, but rebounded in March to a record 4,355.9 million kilowatt hours. Taxable retail sales were so-so in this quarter with February (\$3,724.4 million) making the best showing.

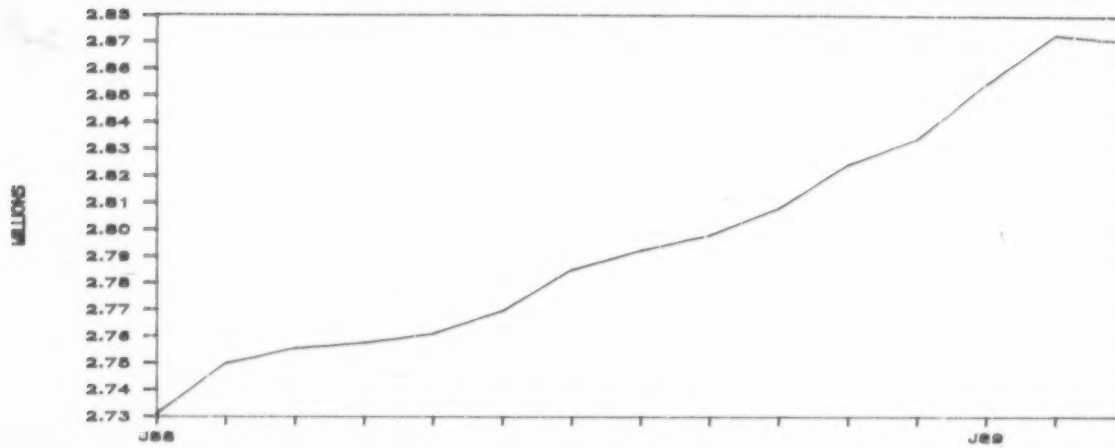
William F. Mezger

EMPLOYMENT INDICATORS
January 1988 to March 1989

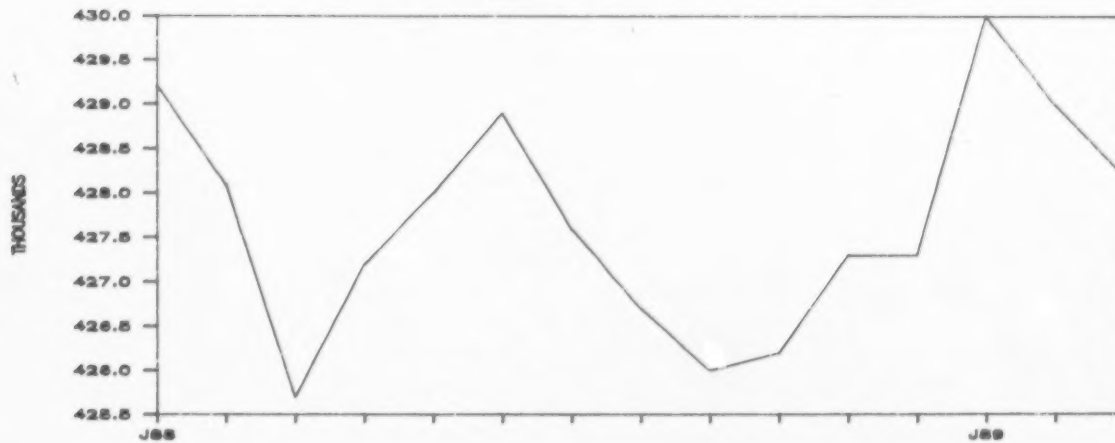
	Nonagricultural Wage and Salary Employment* (Thousands)		Manufacturing Employment* (Thousands)		Total Unemployment Rate* (Percent)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	2,683.6	2,731.2	425.7	429.2	4.4	4.0
February	2,696.4	2,750.0	425.6	428.1	4.0	3.7
March	2,725.2	2,755.7	423.6	425.7	3.8	3.7
April	2,750.0	2,757.9	425.2	427.2	3.8	3.8
May	2,773.5	2,761.3	425.7	428.0	3.5	3.6
June	2,801.3	2,769.8	429.1	428.9	3.7	3.7
July	2,790.2	2,785.1	426.3	427.6	3.5	3.6
August	2,793.0	2,792.5	428.2	426.7	3.8	4.0
September	2,813.6	2,798.3	429.4	426.0	4.1	4.4
October	2,829.9	2,808.4	429.2	426.2	3.7	3.9
November	2,849.4	2,824.6	430.3	427.3	4.0	4.1
December	2,860.7	2,834.2	429.0	427.3	4.1	4.1
1989						
January	2,805.0	2,854.9	426.6	430.0	4.3	3.9
February	2,817.1	2,873.2	426.5	429.0	4.5	4.2
March	2,839.1	2,870.8	426.1	428.2	4.1	3.9

* These series have been adjusted to First Quarter 1988 benchmarks.

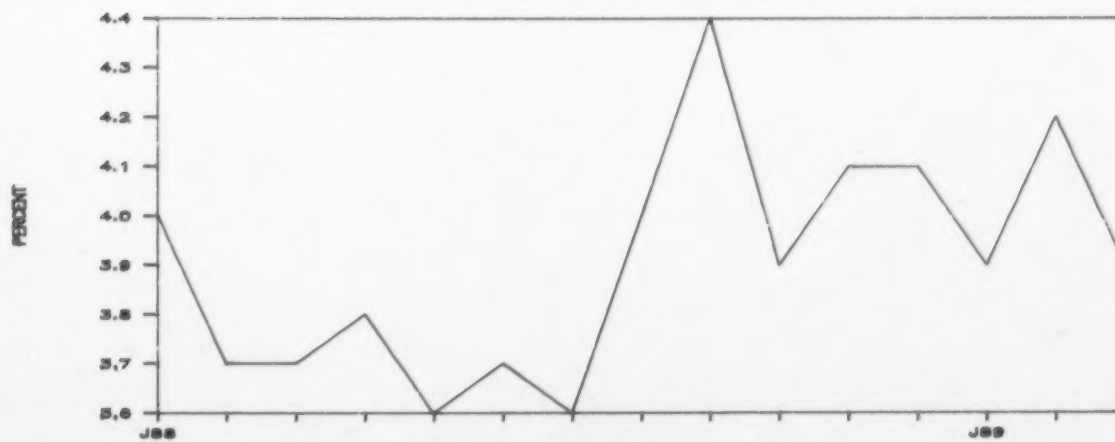
NONAG W & S EMPLOYMENT



MANUFACTURING EMPLOYMENT



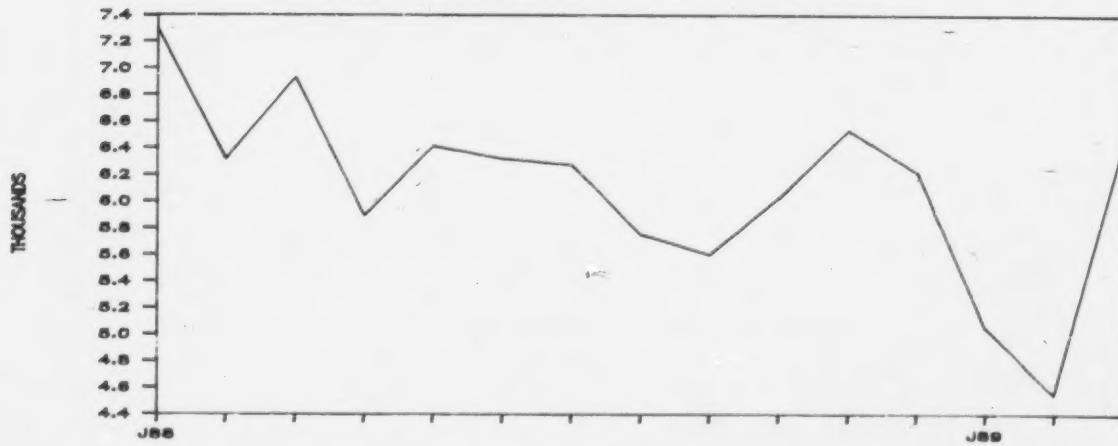
TOTAL UNEMPLOYMENT RATE



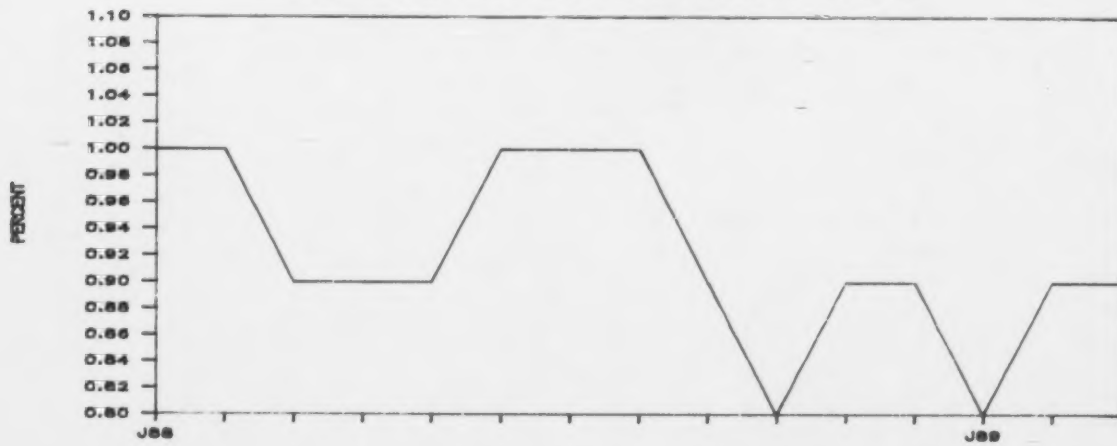
UNEMPLOYMENT INSURANCE INDICATORS
January 1988 to March 1989

	Average Weekly Initial Claims		Average Weekly Insured Unemployment (Percent)		Unemployment Insurance Final Payments	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	11,715	7,290	1.5	1.0	1,655	1,579
February	7,323	6,323	1.3	1.0	1,938	1,963
March	6,252	6,931	1.1	0.9	2,442	2,089
April	4,901	5,896	0.9	0.9	2,157	1,536
May	4,470	6,417	0.8	0.9	1,945	1,698
June	5,521	6,319	0.8	1.0	1,964	1,847
July	6,361	6,272	0.9	1.0	1,868	1,751
August	3,951	5,757	0.8	1.0	1,917	2,102
September	3,525	5,604	0.7	0.9	1,437	1,732
October	4,213	6,032	0.6	0.8	1,228	1,620
November	6,289	6,537	0.8	0.9	1,273	1,790
December	12,074	6,223	1.0	0.9	1,340	1,484
1989						
January	8,114	5,055	1.2	0.8	1,582	1,505
February	5,283	4,550	1.2	0.9	1,491	1,511
March	5,825	6,458	1.1	0.9	1,935	1,657

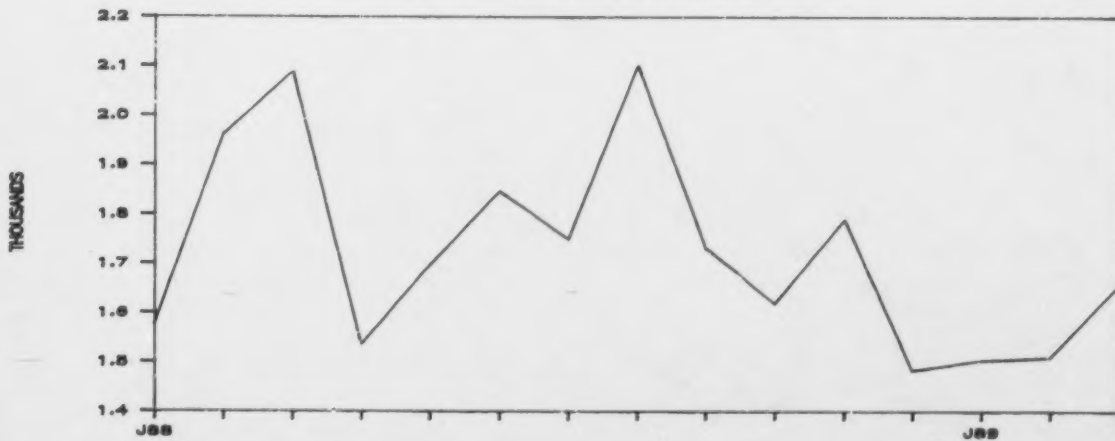
AVG. WEEKLY INITIAL CLAIMS



INSURED UNEMPLOYMENT RATE



U.I. FINAL PAYMENTS

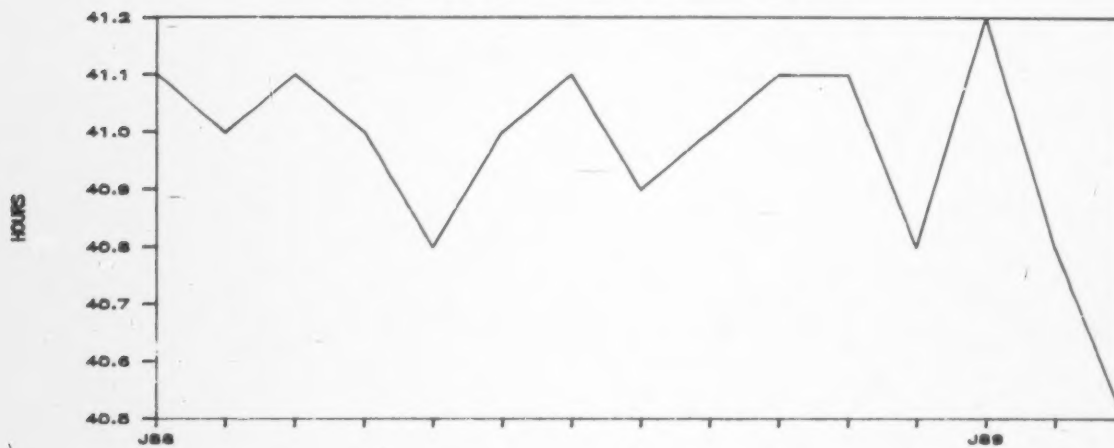


MANUFACTURING PRODUCTION WORKER INDICATORS
January 1988 to March 1989

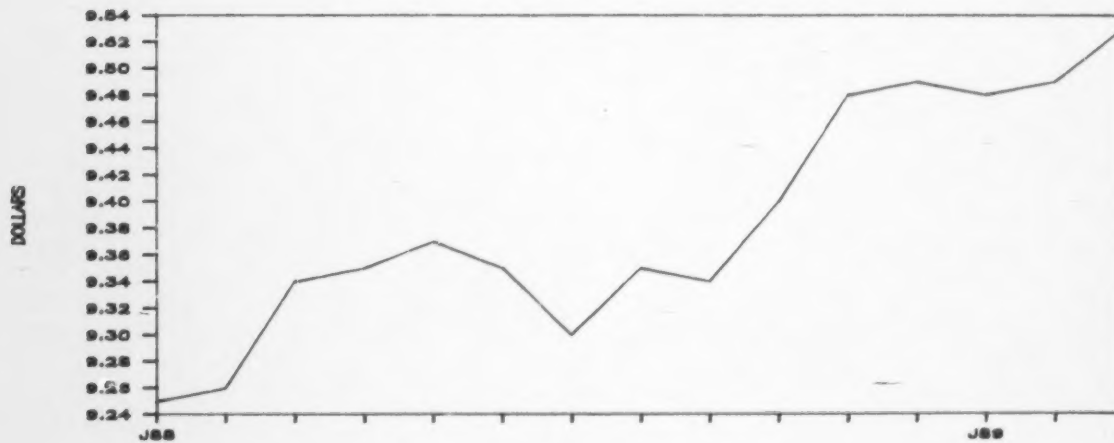
	Average Weekly Hours*		Average Hourly Earnings* (Dollars)		Deflated Average Hourly Earnings* (1982-84 Dollars)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	40.8	41.1	9.27	9.25	8.10	8.07
February	40.4	41.0	9.28	9.26	8.09	8.07
March	40.9	41.1	9.35	9.34	8.12	8.09
April	40.8	41.0	9.34	9.35	8.07	8.04
May	40.8	40.8	9.35	9.37	8.05	8.06
June	41.1	41.0	9.31	9.35	7.98	8.01
July	40.7	41.1	9.30	9.30	7.94	7.94
August	40.7	40.9	9.35	9.35	7.94	7.97
September	41.4	41.0	9.34	9.34	7.88	7.91
October	41.2	41.1	9.37	9.40	7.88	7.93
November	41.7	41.1	9.48	9.48	7.97	7.97
December	41.4	40.8	9.52	9.49	7.99	7.96
1989						
January	40.9	41.2	9.50	9.48	7.94	7.91
February	40.2	40.8	9.52	9.49	7.92	7.90
March	40.4	40.5	9.54	9.53	7.90	7.87

* These series have been adjusted to First Quarter 1988 benchmarks.

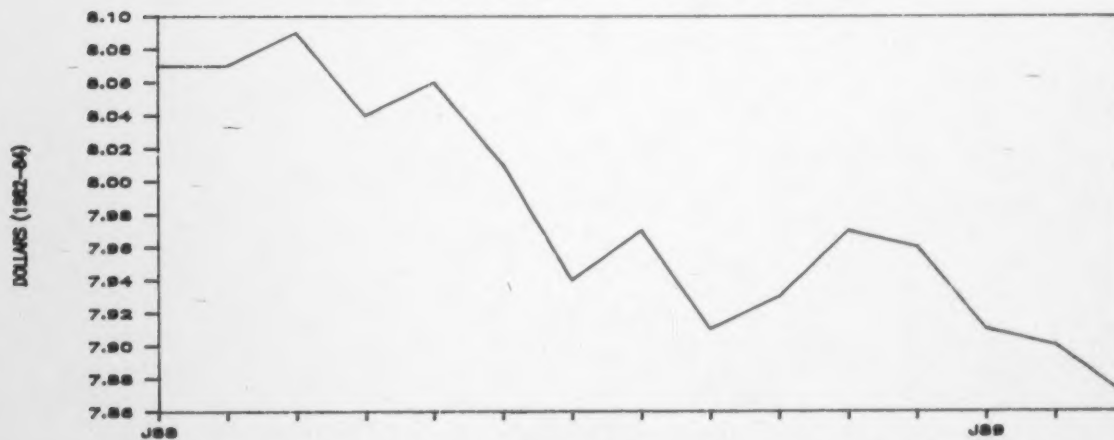
AVERAGE WEEKLY HOURS



AVERAGE HOURLY EARNINGS



AVG. HOURLY EARNINGS/CPI

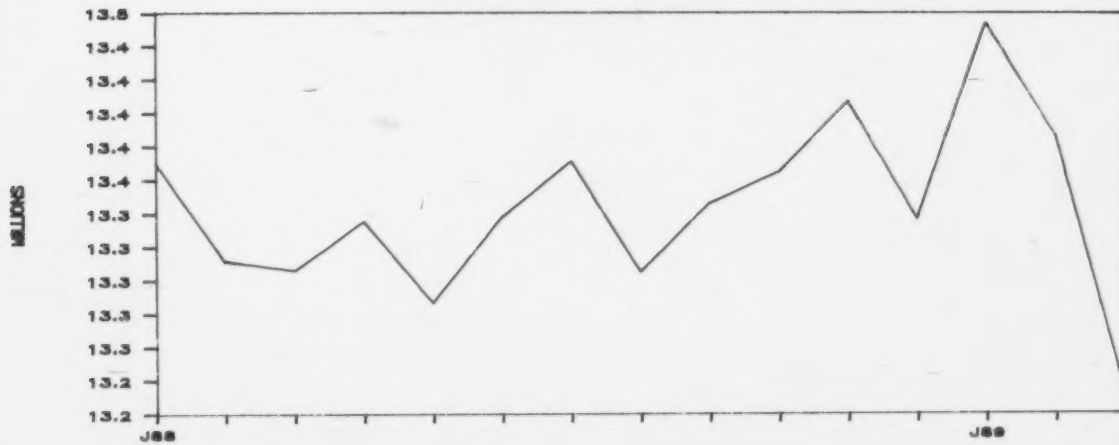


PRODUCTION WORKER INDICATORS (CONTINUED)
January 1988 to March 1989

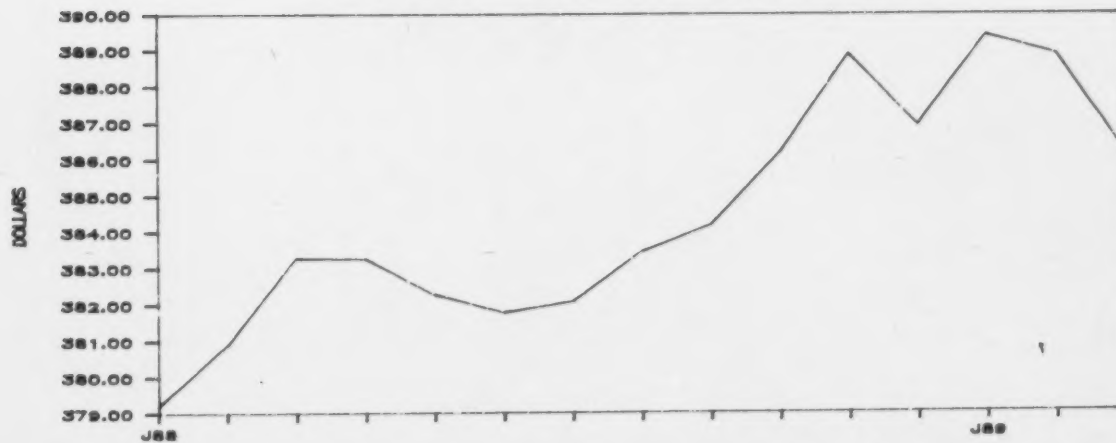
	Average Manhours* (Thousands)		Average Weekly Earnings* (Dollars)		Deflated Average Weekly Earnings* (1982-84 Dollars)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	13,215.1	13,369.2	378.22	379.22	330.32	331.12
February	13,007.5	13,311.8	374.91	380.90	326.86	331.06
March	13,182.1	13,306.1	382.42	383.29	332.25	331.57
April	13,207.0	13,335.6	381.07	383.27	329.36	329.59
May	13,223.3	13,286.9	381.48	382.28	328.30	328.79
June	13,415.0	13,338.2	382.64	381.78	327.88	327.75
July	13,203.1	13,371.1	378.51	382.09	322.96	326.27
August	13,280.4	13,305.4	380.55	383.46	323.32	326.25
September	13,597.2	13,346.4	386.68	384.19	326.31	325.23
October	13,497.1	13,364.9	386.04	386.17	324.68	325.40
November	13,685.9	13,406.9	395.32	388.88	332.20	328.38
December	13,541.9	13,336.9	394.13	386.93	330.65	324.35
1989						
January	13,306.2	13,454.2	388.55	389.41	324.60	325.31
February	13,080.0	13,387.0	382.70	388.90	318.39	322.55
March	13,114.1	13,232.2	385.42	386.15	319.06	318.28

* These series have been adjusted to First Quarter 1988 benchmarks.

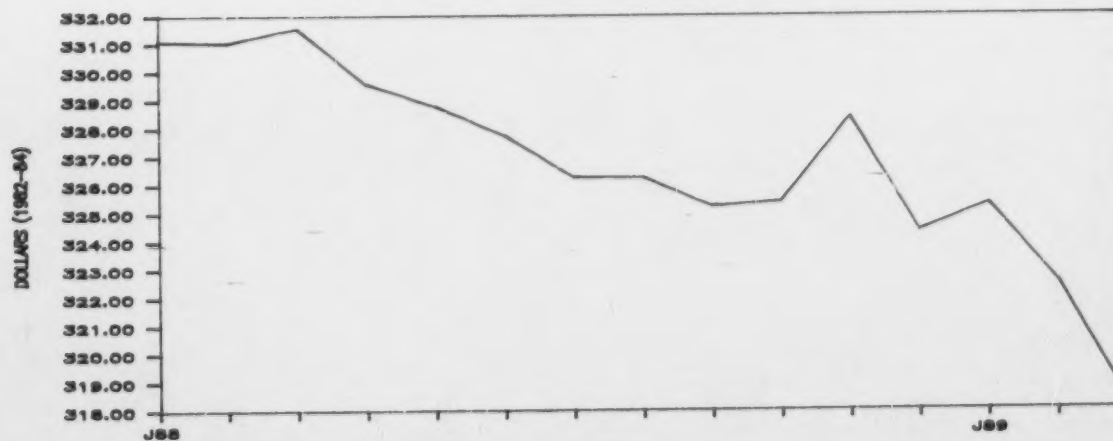
AVERAGE MANHOURS



AVERAGE WEEKLY EARNINGS



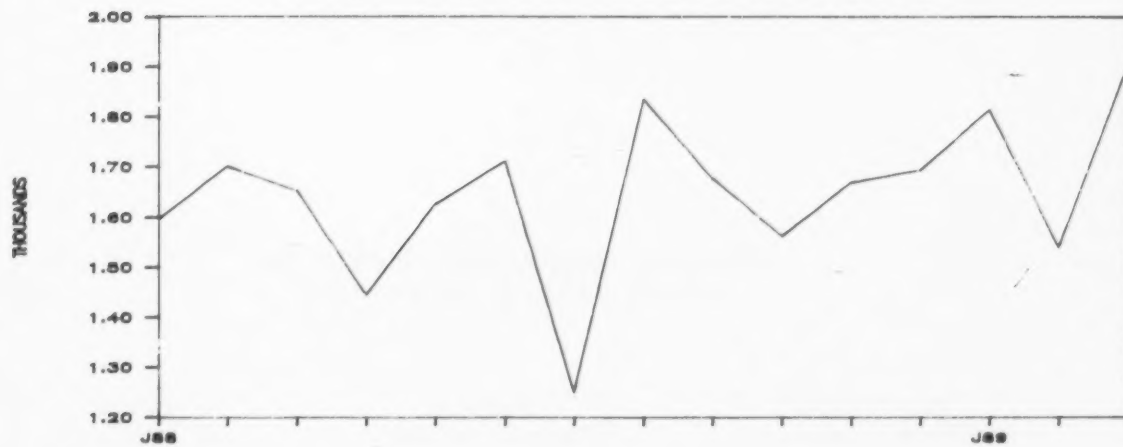
AVG. WEEKLY EARNINGS/CPI



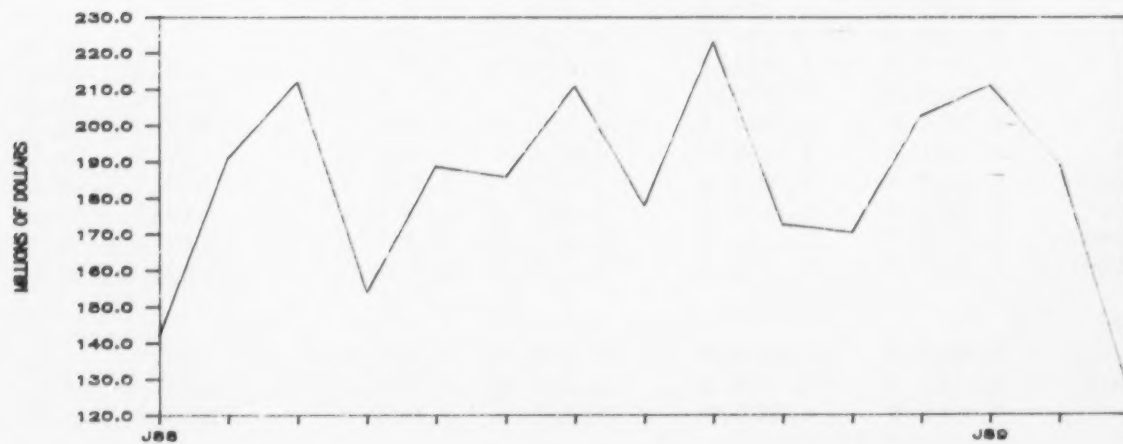
BUSINESS INDICATORS
January 1988 to March 1989

	New Business Incorporations		Valuation of Building Permits (\$ Millions)		New Vehicle Registrations	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	1,451	1,598	110.8	142.4	32,226	31,749
February	1,724	1,702	144.9	191.2	35,797	41,753
March	1,861	1,653	252.9	212.1	42,684	40,842
April	1,573	1,446	153.2	154.2	40,207	37,964
May	1,650	1,627	209.4	188.9	41,767	38,822
June	1,749	1,712	261.2	185.9	42,562	37,247
July	1,280	1,251	215.1	210.9	40,127	36,514
August	1,790	1,835	172.4	178.0	42,282	40,594
September	1,581	1,677	215.1	223.1	39,684	35,753
October	1,547	1,563	174.1	172.7	39,686	37,905
November	1,466	1,670	159.8	170.5	24,976	32,341
December	1,733	1,695	177.8	202.8	27,286	36,982
1989						
January	1,639	1,815	162.6	211.2	36,521	35,877
February	1,559	1,541	142.6	189.4	31,065	36,286
March	2,142	1,904	149.6	125.9	35,217	33,774

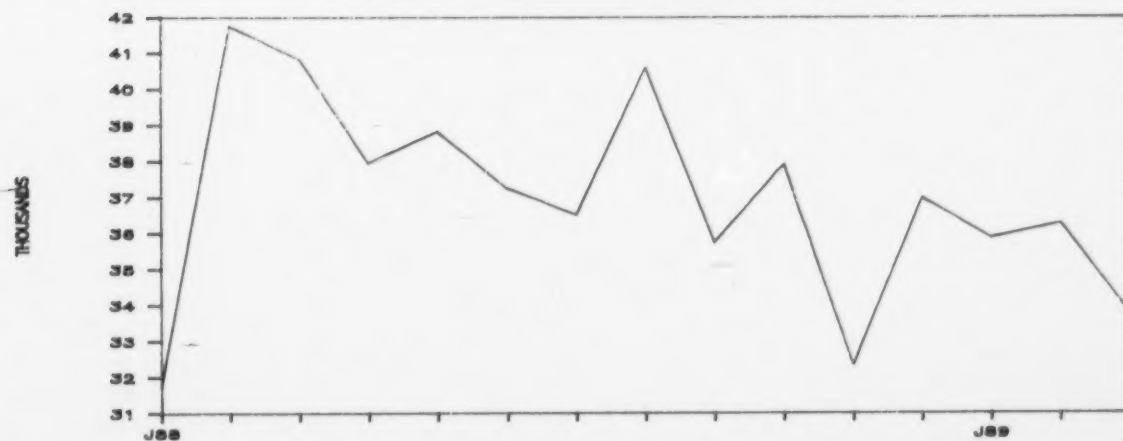
NEW BUSINESS INCORPORATIONS



VALUATION OF BUILDING PERMITS



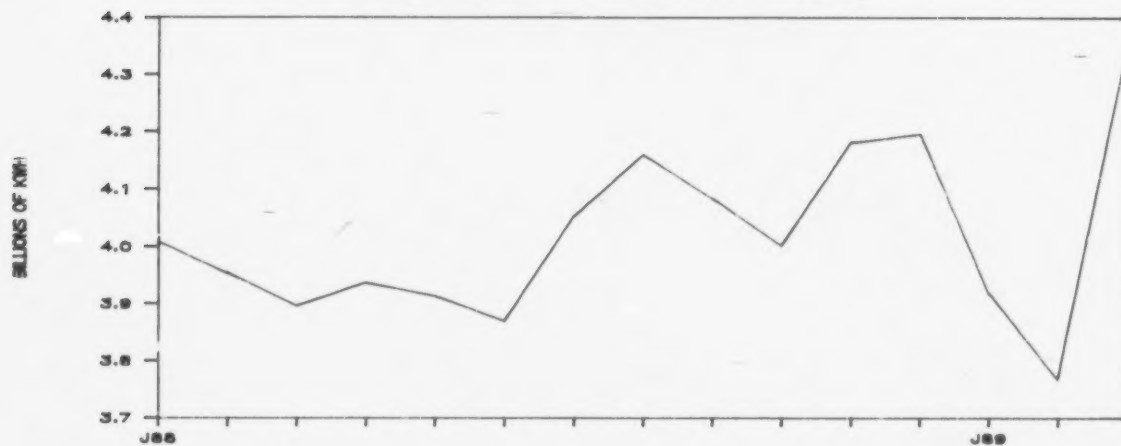
NEW VEHICLE REGISTRATIONS



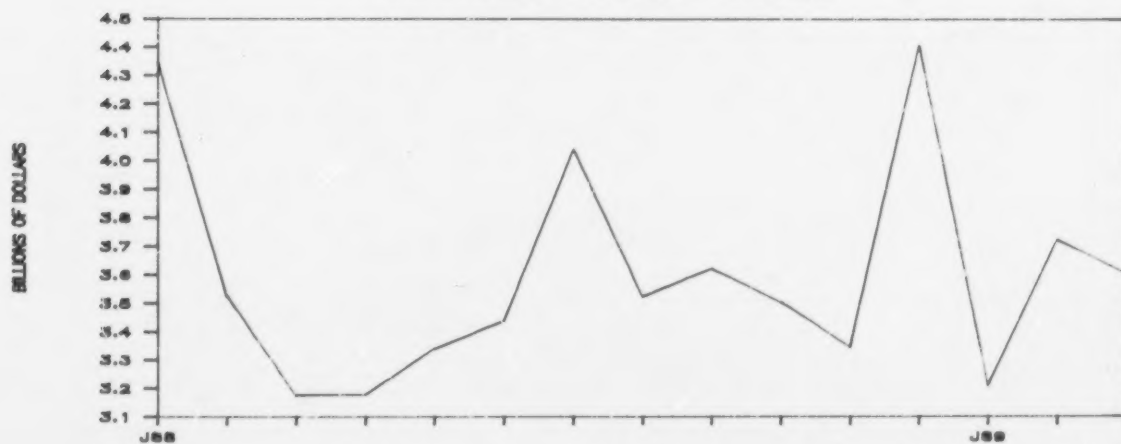
BUSINESS INDICATORS (CONTINUED) —
January 1988 to March 1989

	Electrical Power Sales (Millions of KWH)		Taxable Retail Sales (Millions of Dollars)		Value of Exports (Millions of Dollars)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	4,709.7	4,008.7	3,781.8	4,338.8	114.5	n.a.
February	4,448.0	3,954.3	3,501.8	3,527.4	114.7	n.a.
March	4,008.3	3,896.8	2,935.0	3,174.7	115.1	n.a.
April	3,518.9	3,937.7	2,934.9	3,179.4	115.7	n.a.
May	3,251.7	3,914.0	3,570.8	3,340.4	116.2	n.a.
June	3,704.3	3,869.8	3,541.0	3,439.5	116.7	n.a.
July	4,382.5	4,054.4	4,034.6	4,040.3	117.2	n.a.
August	4,764.8	4,160.7	3,550.4	3,524.2	117.7	n.a.
September	4,200.1	4,084.8	3,705.1	3,622.5	118.5	n.a.
October	3,469.0	4,002.4	3,451.0	3,504.1	118.9	n.a.
November	3,608.6	4,183.0	3,462.9	3,347.0	119.0	n.a.
December	4,217.9	4,198.0	5,002.3	4,408.1	119.2	n.a.
1989						
January	4,602.7	3,919.6	2,795.4	3,210.4	119.7	n.a.
February	4,243.0	3,768.3	3,727.5	3,724.4	120.2	n.a.
March	4,486.8	4,355.9	3,329.1	3,604.6	120.8	n.a.

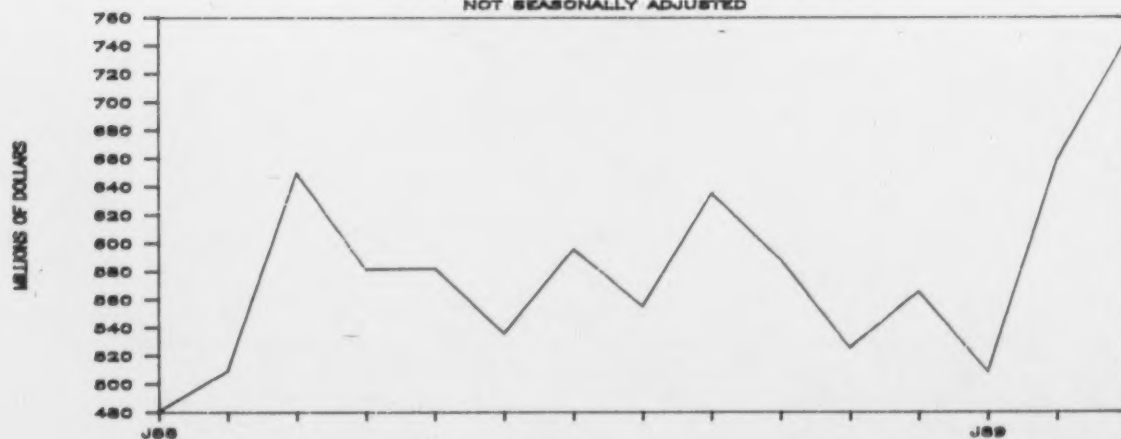
ELECTRICAL POWER SALES



TAXABLE RETAIL SALES



VALUE OF EXPORTS NOT SEASONALLY ADJUSTED



DATA SUMMARY

MARCH 1989

(SEASONALLY ADJUSTED DATA)

EMPLOYMENT

	Mar. 1989	Feb. 1989	Mar. 1988	Feb. Mar. '89	Percent & Direction** of Change '89- '88	Mar. '88- Mar. '89
*Nonag Wage & Salary Emp (000)	2,870.8	2,873.2	2,755.7	-0.1 (-)	4.2 (+)	
*Manufacturing Employment (000)	428.2	429.0	425.7	-0.2 (-)	0.6 (+)	
*Total Unemployment Rate	3.9	4.2	3.7	(+)	(-)	

UNEMPLOYMENT INSURANCE

Average Weekly Initial Claims	6,458	4,550	6,931	41.9 (-)	-6.8 (+)	
Insured Unemployment Rate (%)	0.9	0.9	0.9	(0)	(0)	
Final Payments	1,657	1,511	2,089	9.7 (-)	-20.7 (+)	

MANUFACTURING PRODUCTION WORKERS

*Average Weekly Hours	40.5	40.8	41.1	-0.7 (-)	-1.5 (-)	
*Average Manhours (000)	13,232	13,387	13,306	-1.2 (-)	-0.6 (-)	
*Average Hourly Earnings (\$)	9.53	9.49	9.34	0.4 (+)	2.0 (+)	
*Average Weekly Earnings (\$)	386.15	388.90	383.29	-0.7 (-)	0.7 (+)	

BUSINESS

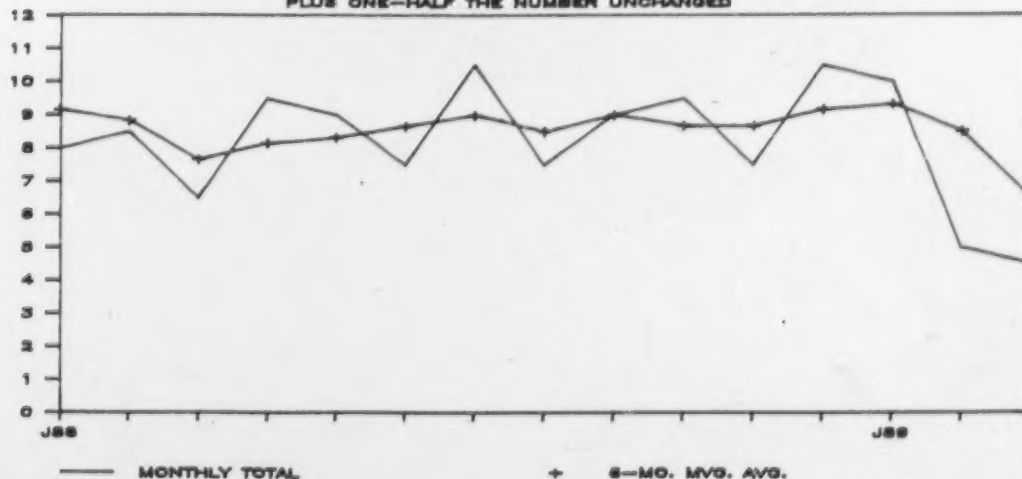
New Business Incorporations	1,904	1,541	1,653	23.6 (+)	15.2 (+)	
Valuation of Bldg Permits (\$M)	125.9	189.4	212.1	-33.5 (-)	-40.6 (-)	
New Vehicle Registrations	33,774	36,286	40,842	-6.9 (-)	-17.3 (-)	
Electrical Pwr Sales (M of KWH)	4,356	3,768	3,897	15.6 (+)	11.8 (+)	
Taxable Retail Sales (\$M)	3604.6	3724.4	3174.7	-3.2 (-)	13.5 (+)	

* Revised to First Quarter 1988 benchmarks.

** (+) Favorable, (-) Not Favorable, (0) Change less than 0.5%.

SUMMARY

NUMBER OF SERIES MOVING FAVORABLY
PLUS ONE-HALF THE NUMBER UNCHANGED



DATA SUMMARY FEBRUARY 1989 (SEASONALLY ADJUSTED DATA)	Percent & Direction** of Change					
	Feb. 1989	Jan. 1989	Feb. 1988	Jan. Feb. '89	'89- Feb. '88-	Feb. '89
EMPLOYMENT						
*Nonag Wage & Salary Emp (000)	2,873.2	2,854.9	2,750.0	0.6 (+)	4.5 (+)	
*Manufacturing Employment (000)	429.0	430.0	428.1	-0.2 (-)	0.2 (+)	
*Total Unemployment Rate	4.2	3.9	3.7	(-)	(-)	
UNEMPLOYMENT INSURANCE						
Average Weekly Initial Claims	4,550	5,055	6,323	-10.0 (+)	-28.0 (+)	
Insured Unemployment Rate (%)	0.9	0.8	1.0	(-)	(+)	
Final Payments	1,511	1,505	1,963	0.4 (-)	-23.0 (+)	
MANUFACTURING PRODUCTION WORKERS						
*Average Weekly Hours	40.8	41.2	41.0	-1.0 (-)	-0.5 (-)	
*Average Manhours (000)	13,387	13,454	13,312	-0.5 (-)	0.6 (+)	
*Average Hourly Earnings (\$)	9.49	9.48	9.26	0.1 (+)	2.5 (+)	
*Average Weekly Earnings (\$)	388.90	389.41	380.90	-0.1 (-)	2.1 (+)	
BUSINESS						
New Business Incorporations	1,541	1,815	1,702	-15.1 (-)	-9.5 (-)	
Valuation of Bldg Permits (\$M)	189.4	211.2	191.2	-10.3 (-)	-0.9 (-)	
New Vehicle Registrations	36,286	35,877	41,753	1.1 (+)	-13.1 (-)	
Electrical Pwr Sales (M of KWH)	3,768	3,920	3,954	-3.9 (-)	-4.7 (-)	
Taxable Retail Sales (\$M)	3724.4	3210.4	3527.4	16.0 (+)	5.6 (+)	

DATA SUMMARY JANUARY 1989 (SEASONALLY ADJUSTED DATA)	Percent & Direction** of Change					
	Jan. 1989	Dec. 1988	Jan. 1988	Dec. '88- Jan. '89	'88- Jan. '89	Jan. '89
EMPLOYMENT						
*Nonag Wage & Salary Emp (000)	2,854.9	2,834.2	2,731.2	0.7 (+)	4.5 (+)	
*Manufacturing Employment (000)	430.0	427.3	429.2	0.6 (+)	0.2 (+)	
*Total Unemployment Rate	3.9	4.1	4.0	(+)	(+)	
UNEMPLOYMENT INSURANCE						
Average Weekly Initial Claims	5,055	6,223	7,290	-18.8 (+)	-30.7 (+)	
Insured Unemployment Rate (%)	0.8	0.9	1.0	(+)	(+)	
Final Payments	1,505	1,484	1,579	1.4 (-)	-4.7 (+)	
MANUFACTURING PRODUCTION WORKERS						
*Average Weekly Hours	41.2	40.8	41.1	1.0 (+)	0.2 (+)	
*Average Manhours (000)	13,454	13,337	13,369	0.9 (+)	0.6 (+)	
*Average Hourly Earnings (\$)	9.48	9.49	9.25	-0.1 (-)	2.5 (+)	
*Average Weekly Earnings (\$)	389.41	386.93	379.22	0.6 (+)	2.7 (+)	
BUSINESS						
New Business Incorporations	1,815	1,695	1,598	7.1 (+)	13.6 (+)	
Valuation of Bldg Permits (\$M)	211.2	202.8	142.4	4.1 (+)	48.3 (+)	
New Vehicle Registrations	35,877	36,982	31,749	-3.0 (-)	13.0 (+)	
Electrical Pwr Sales (M of KWH)	3,920	4,198	4,009	-6.6 (-)	-2.2 (-)	
Taxable Retail Sales (\$M)	3210.4	4408.1	4338.8	-27.2 (-)	-26.0 (-)	

* Revised to First Quarter 1988 benchmarks.

** (+) Favorable, (-) Not Favorable, (0) Change less than 0.5%.

THE VIRGINIA LEADING AND COINCIDENT INDEXES

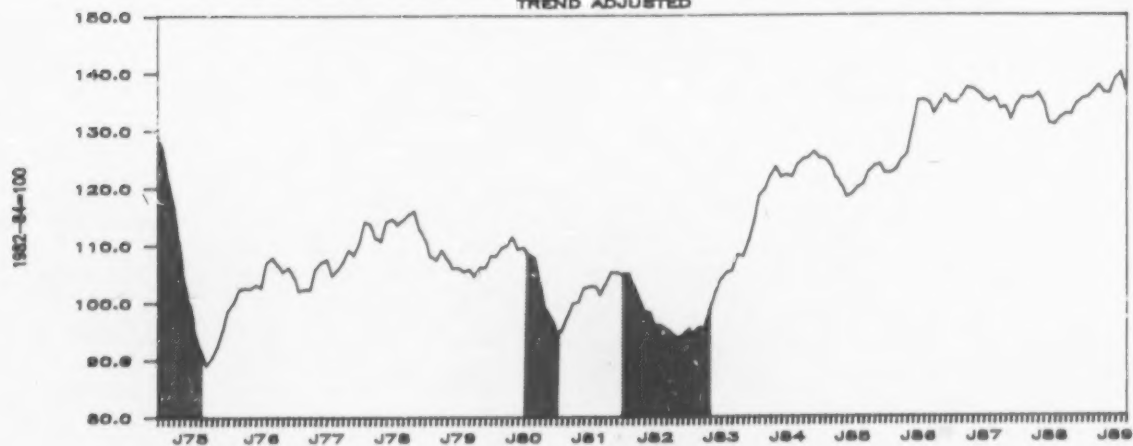
	Leading Index (82-84=100)	Monthly Percent Change	Quarterly Percent Change	Coincident Index (82-84=100)	Monthly Percent Change	Quarterly Percent Change
January, 1988	131.28	-2.6		123.66	+0.4	
February	130.97	-0.2	-3.0	124.69	+0.8	+2.1
March	132.18	+0.9		125.65	+0.7	
April	132.87	+0.5		126.28	+0.4	
May	132.77	-0.0	+1.4	126.49	+0.1	+1.3
June	134.68	+1.4		126.42	-0.0	
July	135.49	+0.6		127.25	+0.6	
August	135.79	+0.2	+1.9	125.97	-1.0	-0.5
September	136.67	+0.6		123.72	-1.7	
October	137.82	+0.8		123.00	-0.5	
November	136.62	-0.8	+0.7	123.10	+0.0	-1.7
December	136.46	-0.1		124.33	+1.0	
January, 1989	138.97	+1.8		124.32	-0.0	
February	140.02	+0.7	+1.2	124.13	-0.1	+0.6
March	137.02	-2.1		124.23	+0.0	

The Virginia Leading Index has been adjusted to a 1982-84 base and includes Average Weekly Hours for Production Workers; New Businesses; Valuation of Building Permits, deflated to 1982-84 dollars; and Average Weekly Initial Claims. The Virginia Coincident Index has been changed to allow better utilization of monthly data. The Index includes Nonagricultural Wage and Salary Employment; Total Unemployment Rate; Taxable Retail Sales, deflated to 1982-84 dollars; and Average Hourly Earnings of Manufacturing Production Workers, deflated to 1982-84 dollars. The Coincident Index also uses a 1982-84 base. All series are adjusted for seasonality and month of cyclical dominance.

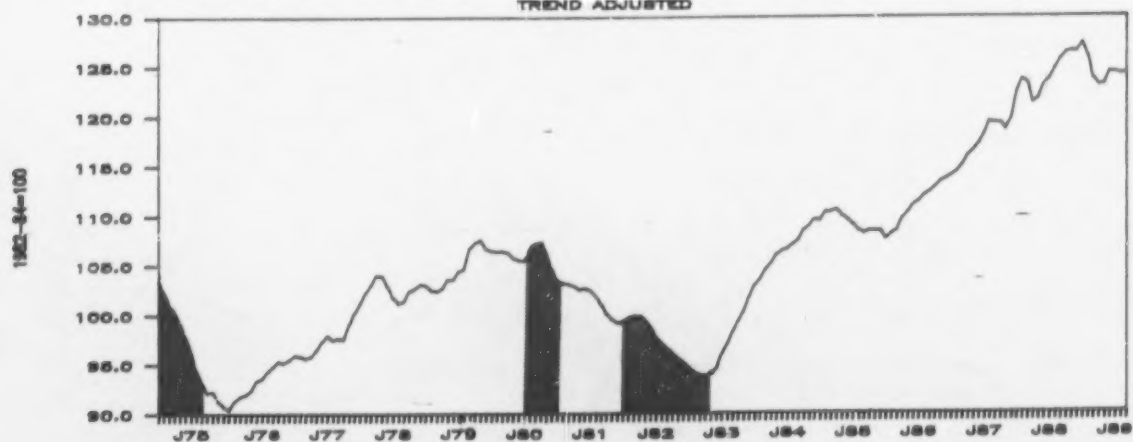
Relatively light claims activity in January and February helped to boost the Leading Index. Declines in weekly hours and building permits combined with an increase in claims activity to cause a 2.1 percent decline in March.

The revised Coincident Index showed a stagnant first quarter after a strong December fueled by exceptional Christmas shopping and employment. The index has remained weak since the second quarter of 1988 as continued gains in employment have been offset by a slight decline in hourly earnings and a slight increase in the adjusted unemployment rate.

VIRGINIA INDEX OF LEADING INDICATORS TREND ADJUSTED



VIRGINIA INDEX OF COINCIDENT INDICATORS TREND ADJUSTED



GOOD JOBS, BAD JOBS

In June 1989, the Virginia Employment Commission released the findings of the study Good Jobs, Bad Jobs, Employment and Wage Level Analysis for the U. S. and Virginia, 1980-1987. The major findings of that study are used as the feature article in this issue of the Economic Indicators. The published report is available from the Economic Information Services Division, P. O. Box 1358, Richmond, Virginia 23211, (804) 786-7496.

Introduction

This Summary Report is based upon an examination of the employment and wage structure of the economies of the United States and Virginia for the 1980 to 1987 period.

The study on which the report is based--Employment and Wage-Level Analysis for the United States and Virginia, 1980 and 1987--"Good Jobs vs. Bad Jobs"--was undertaken in response to the "Good Jobs vs. Bad Jobs issue." The study analyzed the structural shifts that have taken place in the United States and Virginia economies and attempted to clarify, if in fact, whether high-wage jobs were being replaced to a significant degree by low-wage jobs or, in more common terminology, whether "Bad Jobs" were replacing "Good Jobs." Because the major contention of the "Bad Jobs" thesis is that lower-wage "servicing-type" jobs were replacing higher-wage jobs, the major focus of the study was directed to the service-related industries such as Services, Retail Trade, and Finance, Insurance and Real Estate.

The data concepts used in the study are annual averages for both employment and wages which measure the average levels of employment and wages over a one-year period. The employment measure used is "covered employment" which measures employment in those industries covered by unemployment compensation laws and excludes segments of agriculture, the railroad industry, and certain self-employed and family workers. The concept used to delineate high-wage

employment from low-wage employment is the All-Industry average wage with employment in industries which paid above the All-Industry average considered high-wage and those below this level considered low-wage. This is a relatively stringent standard since the All-Industry average annual wage for the United States in 1987 was \$20,852, and for Virginia was \$19,968--levels which would not normally be considered as equating to low wages.

Employment Structure

The economies of both the United States and Virginia have undergone major structural employment changes in the 1980s, with declines or slow growth in the industries which were the traditional employment leaders such as Manufacturing and Government, and very rapid growth in "servicing-type" industries such as Services, Retail Trade, and Finance, Insurance and Real Estate. As a result, by 1987 Services had become the leading employer and Retail Trade became the third leading employer in both the United States and Virginia. In the United States, Manufacturing went from the employment leader in 1980 to second in 1987, and Government went from being the third leading employer in 1980 to the fourth in 1987. In Virginia, Manufacturing dropped from the second leading employer in 1980 to fourth in 1987, and Government went from the leading employer in 1980 to second in 1987.

As the shifts in employment ranking indicate, employment growth in the 1980s was heavily concentrated in the Services and Retail Trade industries in both the United States and Virginia. In fact, Services and Retail Trade were first and second in employment growth from 1980 to 1987 and accounted for the majority of new jobs in both economies. However, the growth was much more concentrated in these two sectors in the United States than in Virginia, with 84 percent of the new jobs accounted for by Services and Retail Trade in the nation and 63 percent in Virginia.

Employment growth in Virginia was more rapid than in the nation, with total employment growing more than twice as fast, and each of the ten major industry sectors growing by more or declining by less in Virginia than in the United States.

Wage Structure

The wage structure of the economies of the United States and Virginia were quite similar with parallel wage-level rankings for the major industries. However, average wages were generally higher in the United States than in Virginia, with seven of the ten major industries paying higher wages in the nation in 1987.

The shifts in the employment and industrial structure of the economies of the United States and Virginia have also impacted the wage structure since the traditional employment leaders (Manufacturing and Government) generally pay above-average wages, while the "servicing-type" industries (Services and Retail Trade, which have displaced them) generally pay below-average wages. As a result of the rapid and concentrated growth in the Services and Trade industries, while Manufacturing and Government were declining or growing less rapidly, the majority of the employment growth in the 1980 to 1987 period was in industries which paid below-

average wages in both the United States and Virginia. These employment and industrial shifts and their impact on the wage structure would tend to support the thesis that higher-wage jobs were being replaced by lower-wage jobs in both the United States and Virginia. However, a closer and more in-depth analysis of the employment and wage data does not support this thesis, as will be spelled out in the concluding section of this Summary Report.

Conclusions

Based on the standard of the All-Industry average wage which was approximately \$21,000 in the economy of the United States and approximately \$20,000 in Virginia in 1987, nearly one-third (31 percent) of the new jobs in the United States and over one-third (36 percent) of the new jobs in Virginia were in industries which paid average wages above the All-Industry average wage. As stated earlier, this factor lends credence to the "Bad Jobs" replacement argument. However, in reviewing the average wages of the ten major industries, the data shows that seven of these industries in both the United States and Virginia paid average wages above the All-Industry average wage in 1987.

The Service industry was very close to the All-Industry average, being ten percent below in the United States and four percent below in Virginia. Only two of the ten major industries--Agriculture, Forestry, and Fisheries (which is a very small employer) and Retail Trade (which is a major employer) had average wages significantly below the All-Industry average wage. The 1980s new-jobs analysis in the United States was significantly influenced by declines in the high-wage Manufacturing and Mining industries, combined with very rapid growth in the lower-than-average wage Services and Retail Trade industries; while Government, a high-wage employer, was

experiencing only modest growth (2.7 percent from 1980 to 1987). In Virginia similar factors influenced the new-jobs analysis as Mining experienced a significant employment decline; while Manufacturing and Government grew modestly, Services and Retail Trade experienced very rapid growth. If the new jobs in the Service industry which paid average wages very close to the All-Industry average in 1987 were added to the employment growth in the industries which paid above the All-Industry average wage, the percentage of new jobs in industries which paid above-average wages would increase from 31 percent to 85 percent in the United States and in Virginia from 36 percent to 73 percent.

Further analysis involving a review of the comparative employment and wage structure of the Service industry only raises further questions about the validity of the "Bad Jobs" thesis--especially in Virginia.

Within the Service industry which is the leading employer in both the United States and Virginia and by far the employment growth leader in both economies from 1980 to 1987 and which pays average wages very close to the All-Industry standard in both economies, the findings are mixed between the United States and Virginia. Virginia's Service sector is in a much more favorable wage-level situation than is the Service sector in the United States. The average wages in Virginia's Service sector were higher than those for the United States and

closer to the All-Industry average--four percent below in Virginia versus ten percent below in the United States. More significantly in 1987, approximately two-thirds (65 percent) of Virginia's Service industry employment was in industry groups which paid above the All-Industry average wage compared to 41 percent for the United States. In terms of new Service industry jobs from 1980 to 1987, almost three-fourths (72 percent) of the increased employment in Virginia was in industry groups which paid above-average wages versus 37 percent for the United States.

Thus, in looking at the Service industry as a barometer of "servicing-type" employment shifts, the experience in Virginia clearly indicates that there has not been a significant replacement of high-wage jobs by low-wage jobs. While in the United States, the data is not so clear and points in the direction of some replacement of high-wage jobs by low-wage jobs.

The overall employment and industrial sector analysis and the Service industry analysis in the Study and this Summary Report does not show any significant replacement of "Good Jobs" by "Bad Jobs" in either the United States or Virginia. However, it does show that Virginia's employment and wage structure is in a more favorable position with regard to employment growth, new-job creation, and wage levels than is that of the United States.

Robert J. Griffis

HISTORICAL SUMMARY

PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE

GENERAL INFORMATION

For those interested in studying the business cycle in Virginia, this publication includes several of the economic time series for which data is readily available on a monthly basis. From time to time, new series will be added and, if necessary, others presently included will be discontinued.

Business Cycle Turning Points

The shaded spaces on the charts represent the 1973-75, 1980, and 1981-82 recessions as designated by the National Bureau of Economic Research (NBER). The beginning of a recession is defined as the month when aggregate economic activity in the U. S. reaches a cyclical high, from which it begins to turn down, and the end as the month when it reaches a cyclical low, from which it begins to turn up. According to NBER, the 1973-75 recession began in November 1973 and ended in March 1975, the 1980 recession began in January 1980 and ended in July 1980, and the 1981-82 recession began in July 1981 and ended in November 1982.

Seasonal Adjustment

To correlate changes in a time series and changes in the business cycle it is

desirable to eliminate, insofar as possible, the effect of irrelevant factors from the data comprising the series. All series currently published in Indicators have been adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle.

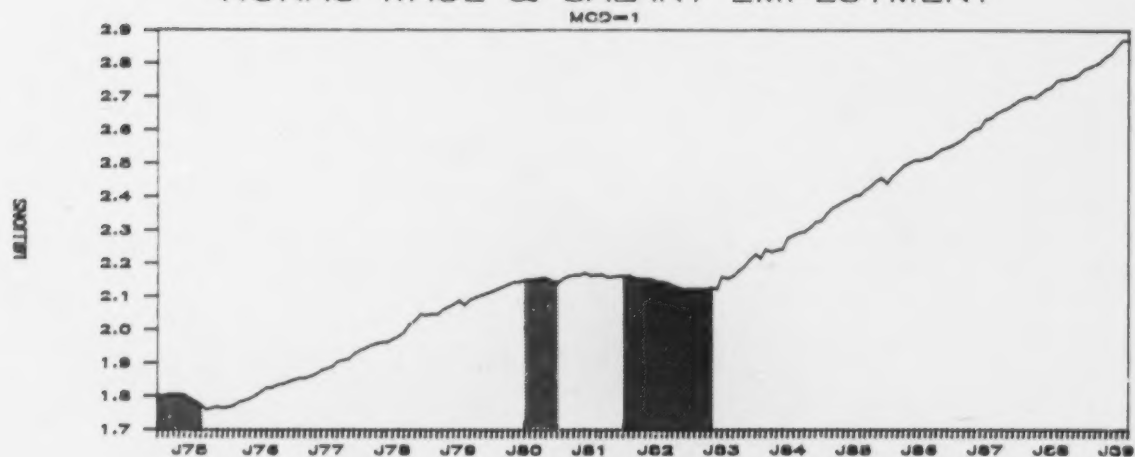
Months for Cyclical Dominance (MCD)

After seasonal adjustment there often remains a significant degree of purely random change, the effect of which can be minimized with a moving average equal in length to the MCD of the series. The MCD is an estimate of the length of the moving average which will reveal the cyclical pattern among the welter of random fluctuations in the data--the greater the MCD the more random and less cyclically significant are monthly changes in the series. Where noted, charts of historical data in this publication represent seasonally adjusted figures which have been averaged according to the MCD of each series.

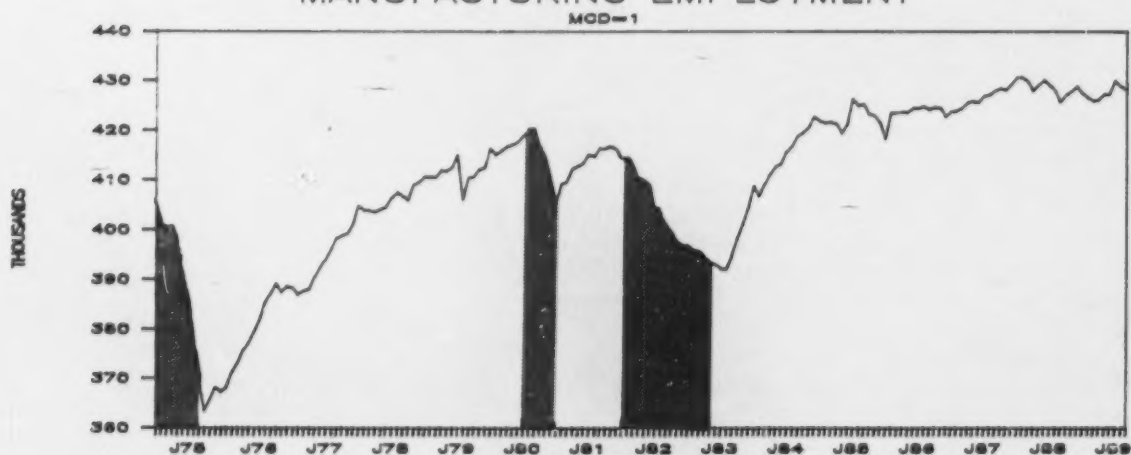
DATA SOURCES

Nonagricultural Wage and Salary Employment.....	Virginia Employment Commission (VEC)
Manufacturing Employment.....	VEC
Total Unemployment Rate.....	VEC
Average Weekly Initial Claims.....	VEC
Insured Unemployment Rate.....	VEC
Unemployment Insurance Final Payments.....	VEC
Average Manhours.....	VEC
Average Hourly Earnings.....	VEC
Average Weekly Earnings.....	VEC
Average Workweek.....	VEC
Average Hourly Earnings/CPI.....	VEC
Average Weekly Earnings/CPI.....	VEC
New Business Incorporations.....	Virginia State Corporation Commission
Valuation of Building Permits - 18 Cities.....	Local Building Inspectors
New Vehicle Registrations.....	Virginia State Division of Motor Vehicles
Electrical Power Sales.....	Virginia Power, Appalachian Power Co., Delmarva Electric Co., Tennessee Power Company
Taxable Retail Sales.....	Virginia State Department of Taxation
Taxable Retail Sales/CPI.....	Virginia State Department of Taxation

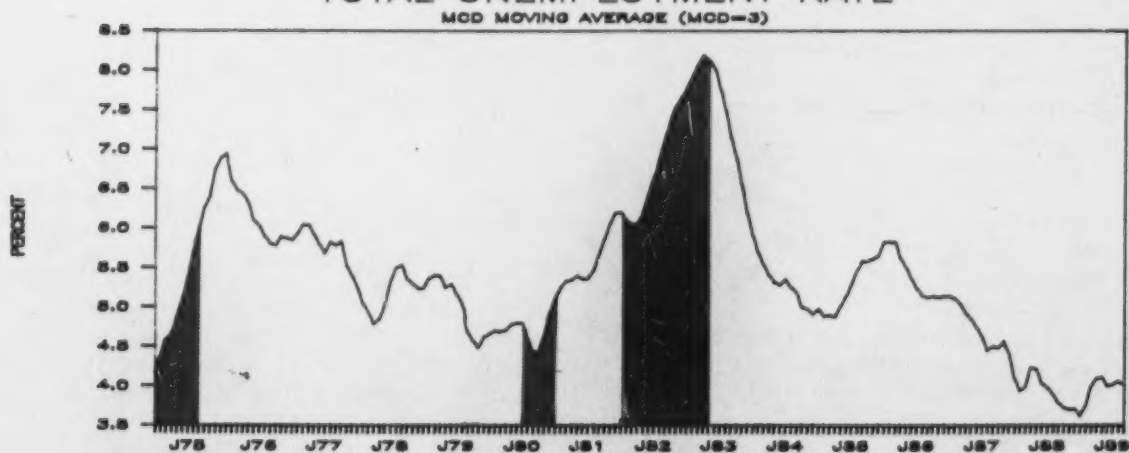
NONAG WAGE & SALARY EMPLOYMENT



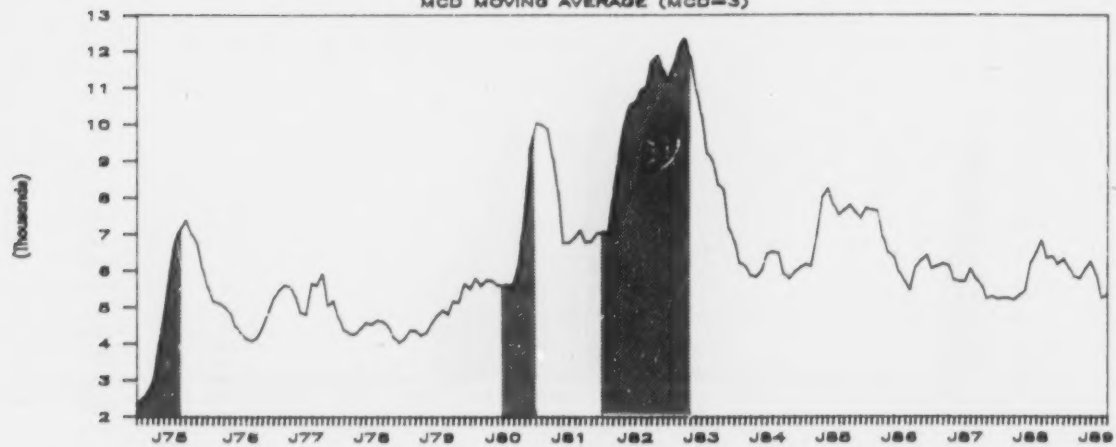
MANUFACTURING EMPLOYMENT



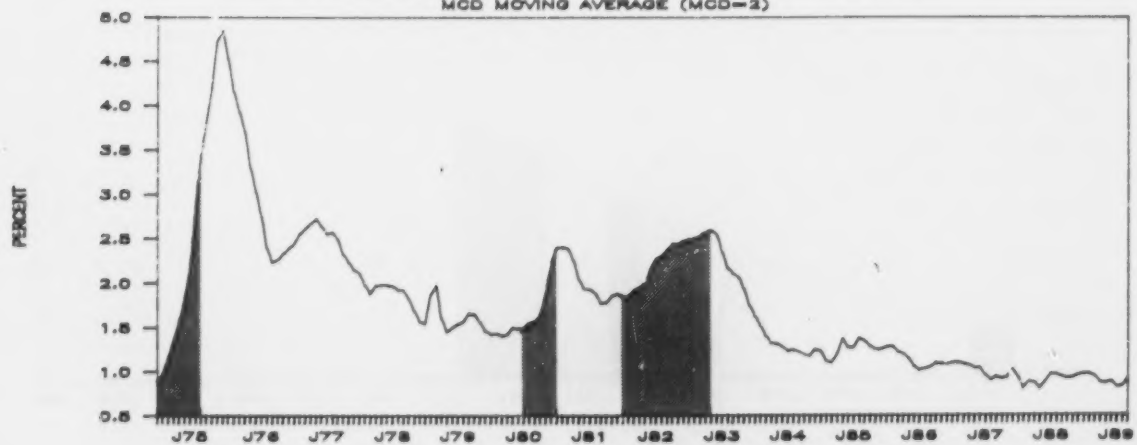
TOTAL UNEMPLOYMENT RATE



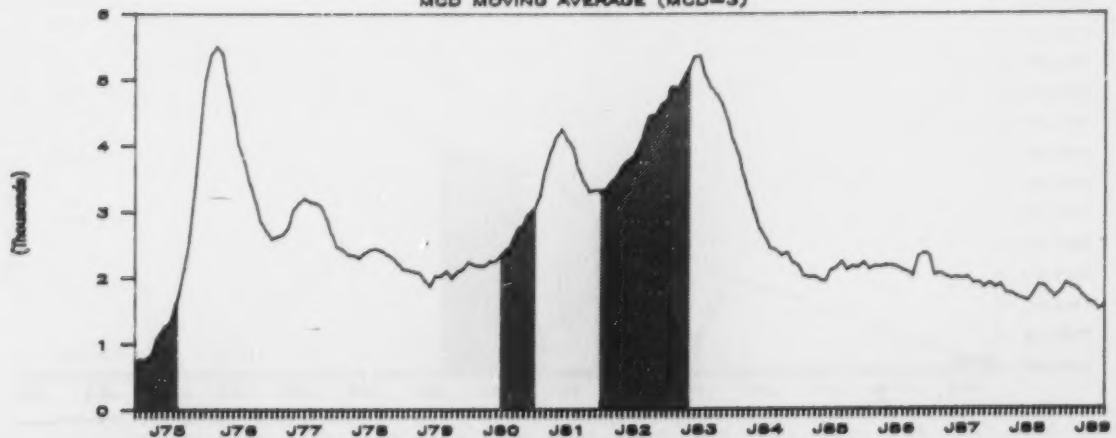
AVERAGE WEEKLY INITIAL CLAIMS MCD MOVING AVERAGE (MCD=3)



INSURED UNEMPLOYMENT RATE MCD MOVING AVERAGE (MCD=2)

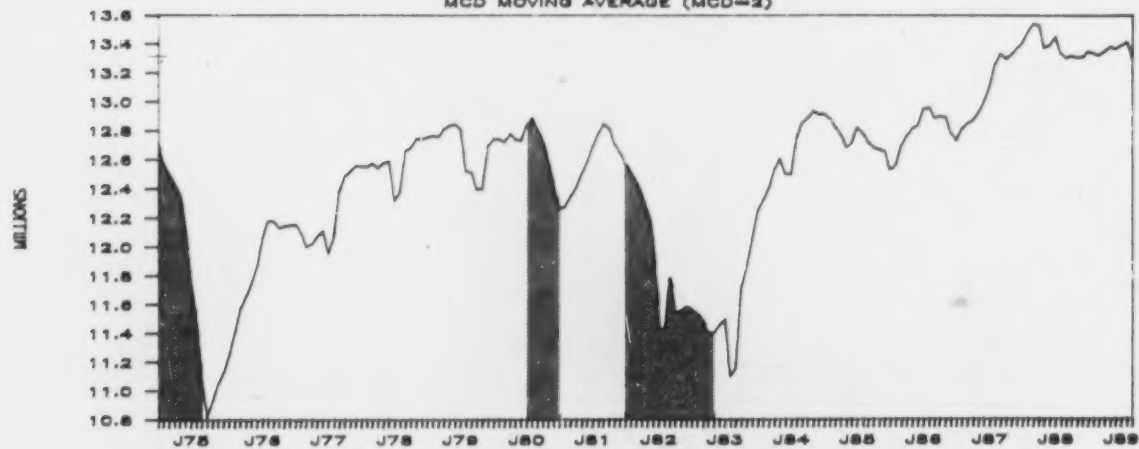


U. I. FINAL PAYMENTS MCD MOVING AVERAGE (MCD=3)



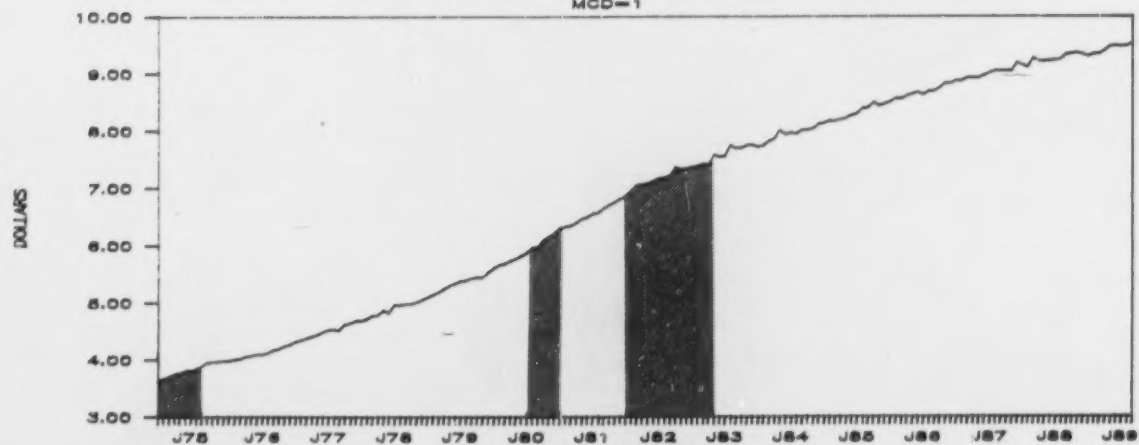
AVERAGE MANHOURS

MCD MOVING AVERAGE (MCD=2)



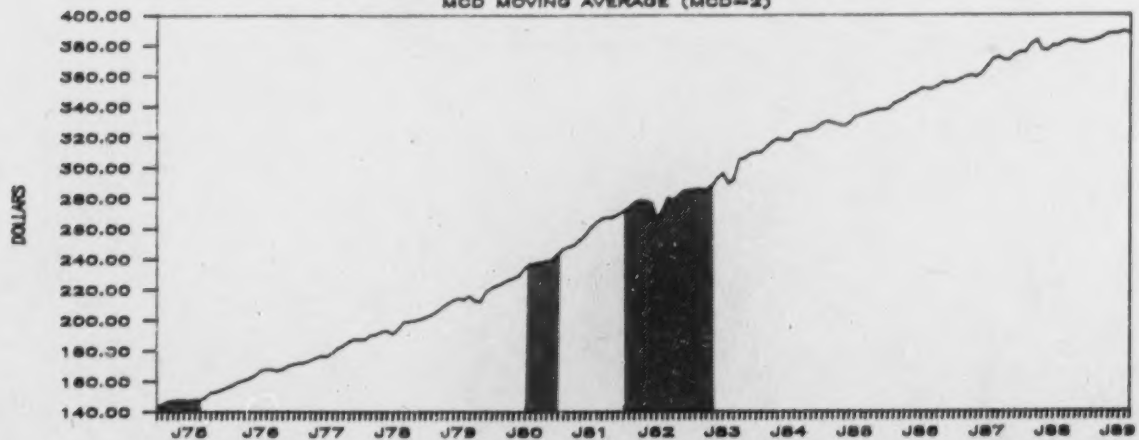
AVERAGE HOURLY EARNINGS

MCD=1



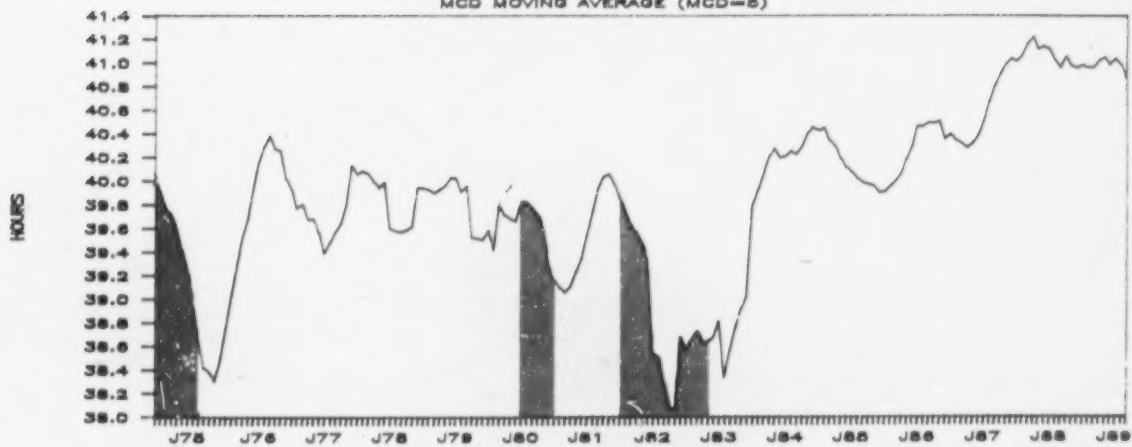
AVERAGE WEEKLY EARNINGS

MCD MOVING AVERAGE (MCD=2)



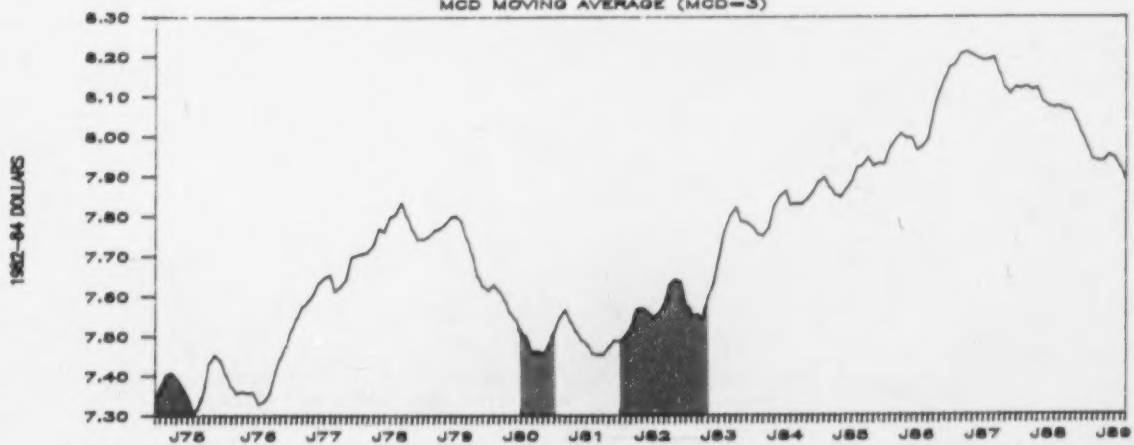
AVERAGE WORKWEEK

MCD MOVING AVERAGE (MCD=5)



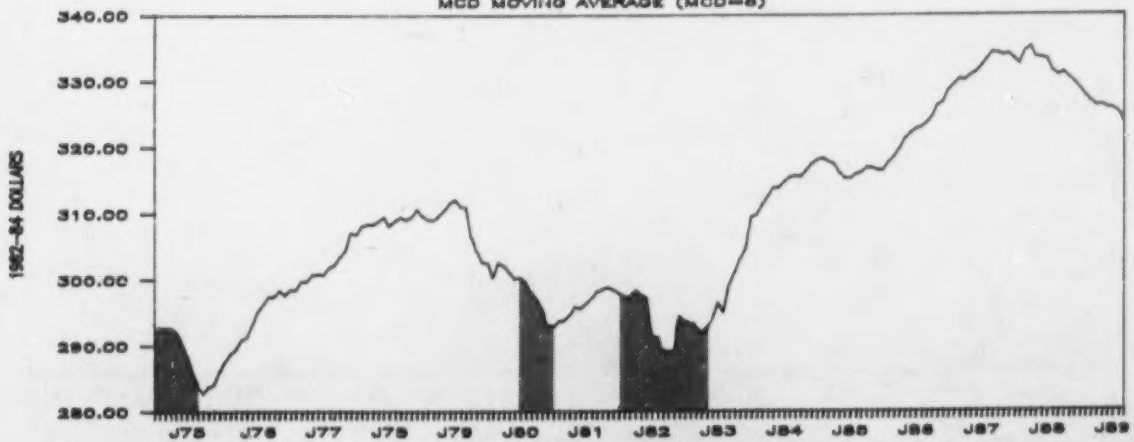
AV. HOURLY EARNINGS/CPI

MCD MOVING AVERAGE (MCD=3)

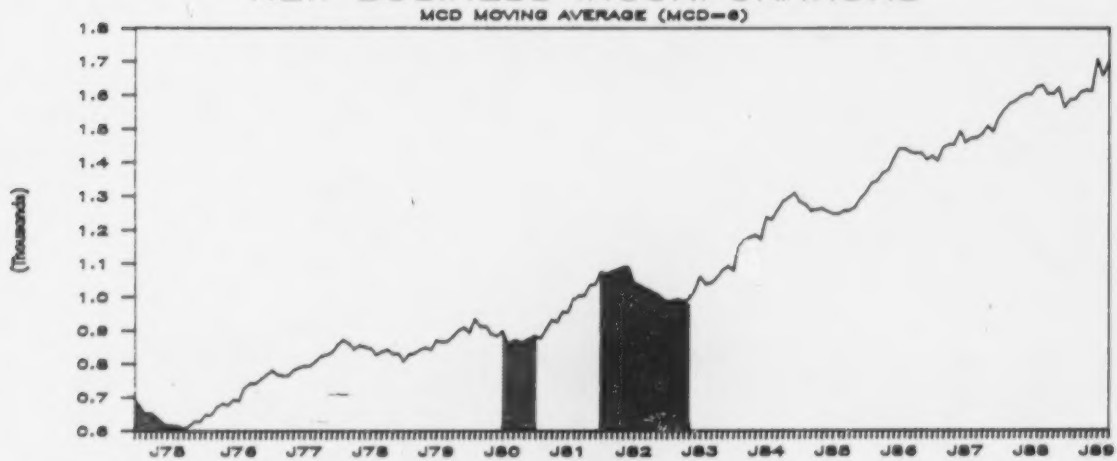


AV. WEEKLY EARNINGS/CPI

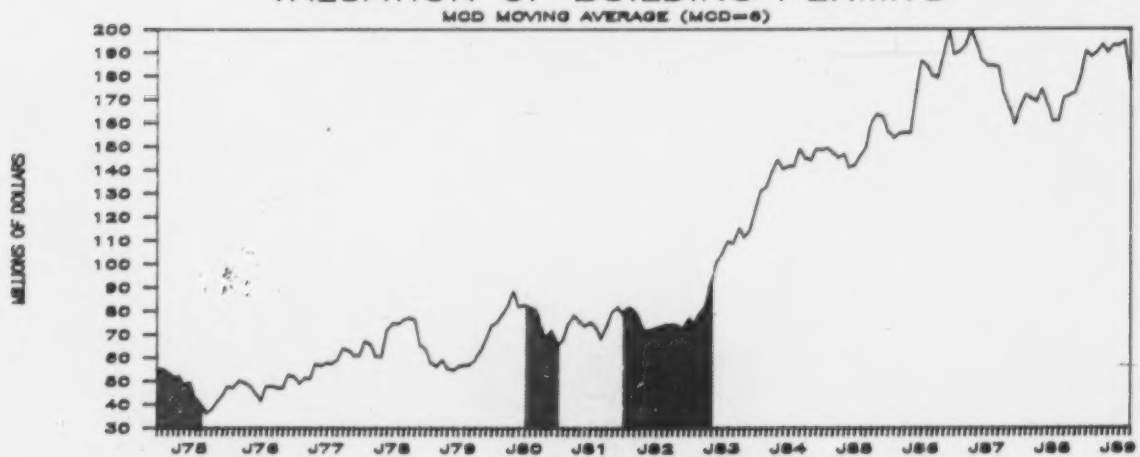
MCD MOVING AVERAGE (MCD=5)



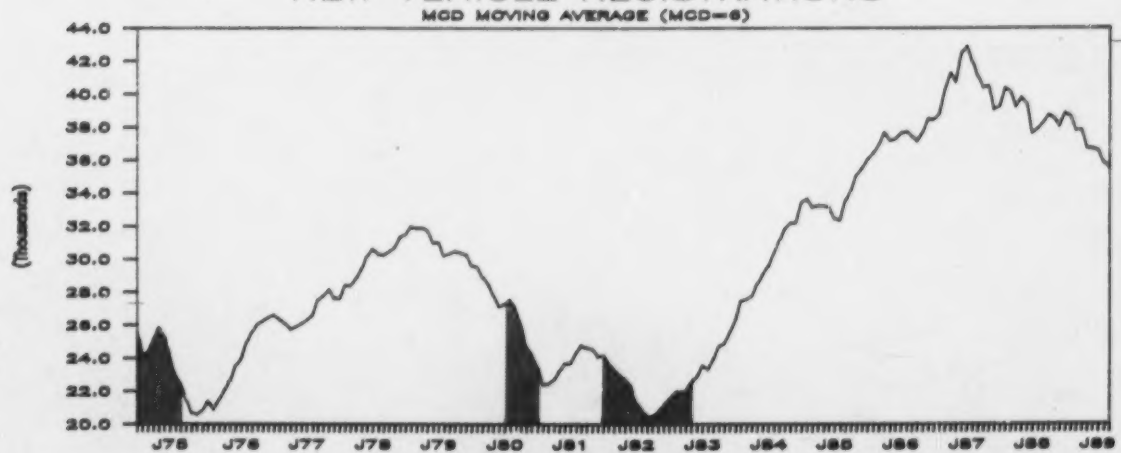
NEW BUSINESS INCORPORATIONS



VALUATION OF BUILDING PERMITS

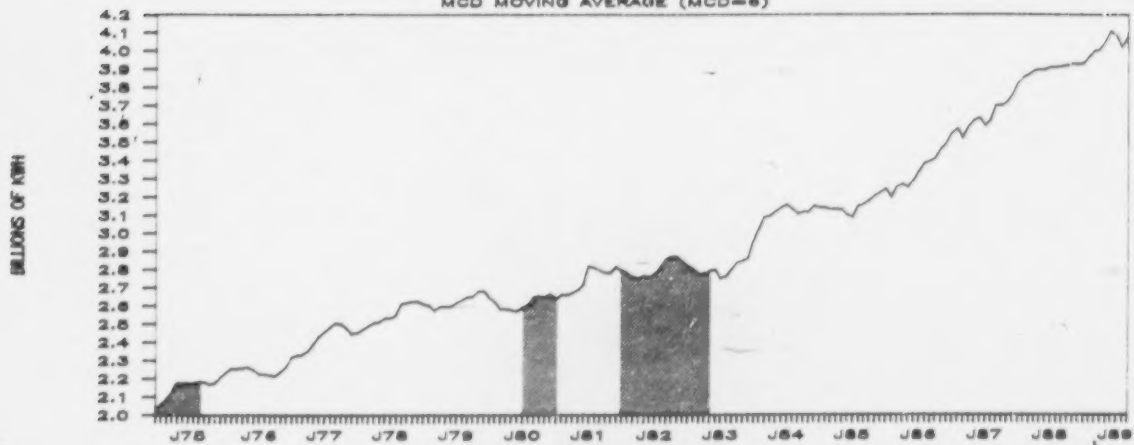


NEW VEHICLE REGISTRATIONS



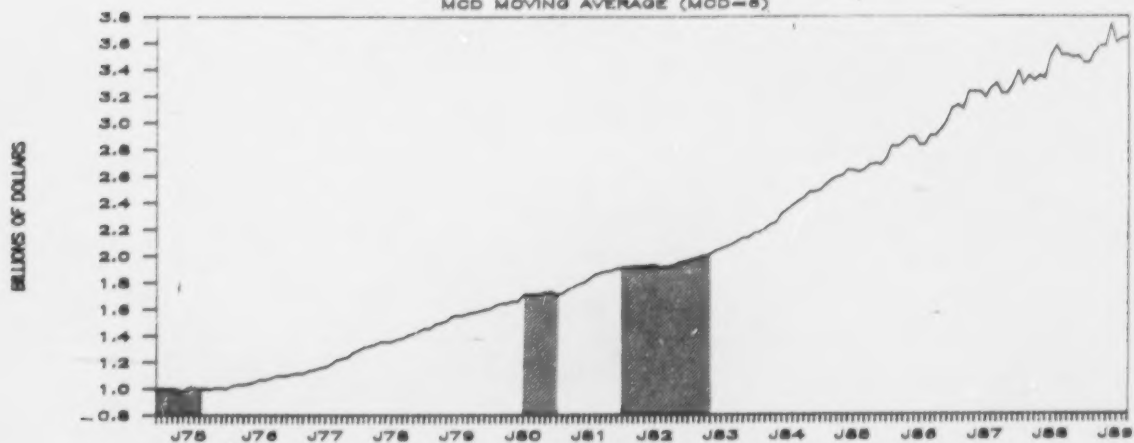
ELECTRICAL POWER SALES

MCD MOVING AVERAGE (MCD=6)



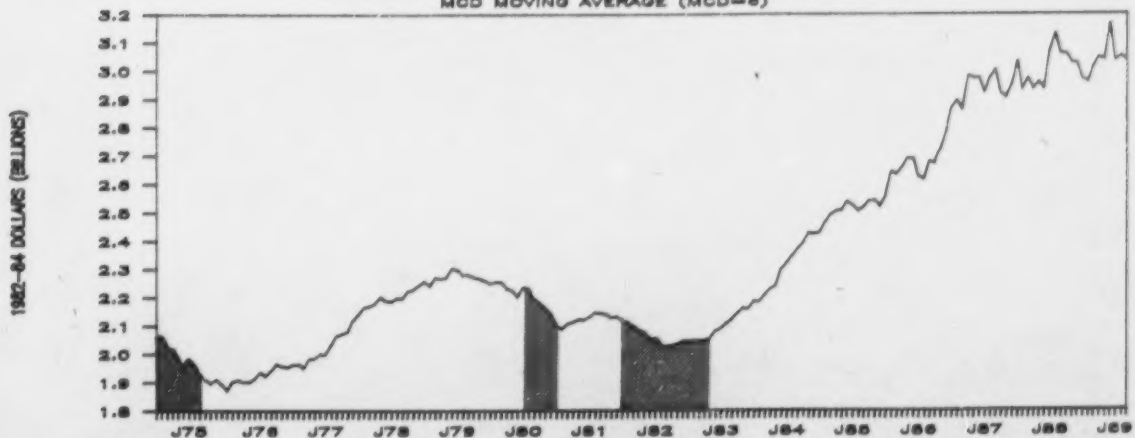
TAXABLE RETAIL SALES

MCD MOVING AVERAGE (MCD=6)



TAXABLE RETAIL SALES/CPI

MCD MOVING AVERAGE (MCD=6)



Virginia Employment Commission
Economic Information Services Division
Post Office Box 1358
Richmond, Virginia 23211-1358



Virginia Employment Commission

58-41A
1/21/89

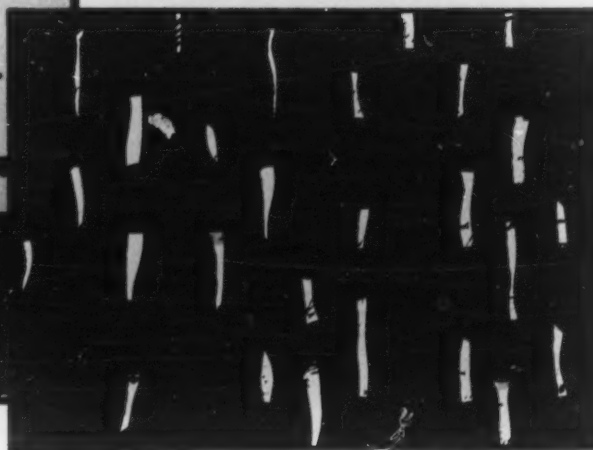
VIRGINIA ECONOMIC INDICATORS

VOL. XXI NO. 2

2nd QUARTER 1989 DATA



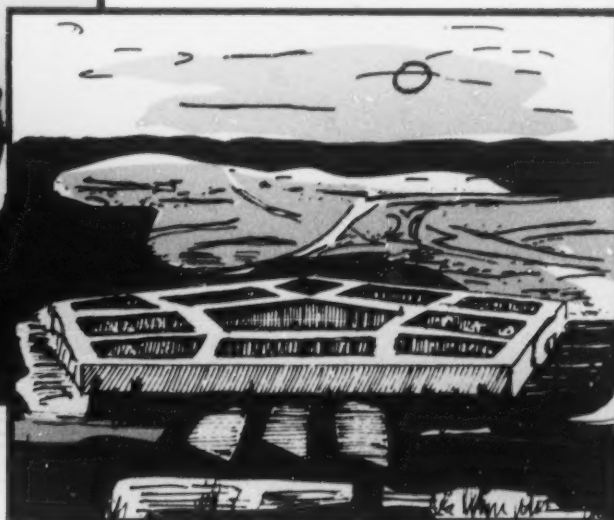
TOURISM



TEXTILES



TOBACCO



GOVERNMENT



FOREWORD

This publication is designed to depict the movement of Virginia's key economic indicators in graphic and tabular form with accompanying narrative analysis.

We welcome any comments, suggestions, or questions concerning Virginia Economic Indicators. Please address your comments to: Dolores A. Esser, Director, Economic Information Services Division, Virginia Employment Commission, P. O. Box 1358, Richmond, Virginia 23211. For additional information or explanation of the contents of this document, you may contact the Economic/Operations Research section at (804) 786-3177/5669.

Our Telephone Device for the Deaf (TDD) number is (804) 371-8050.

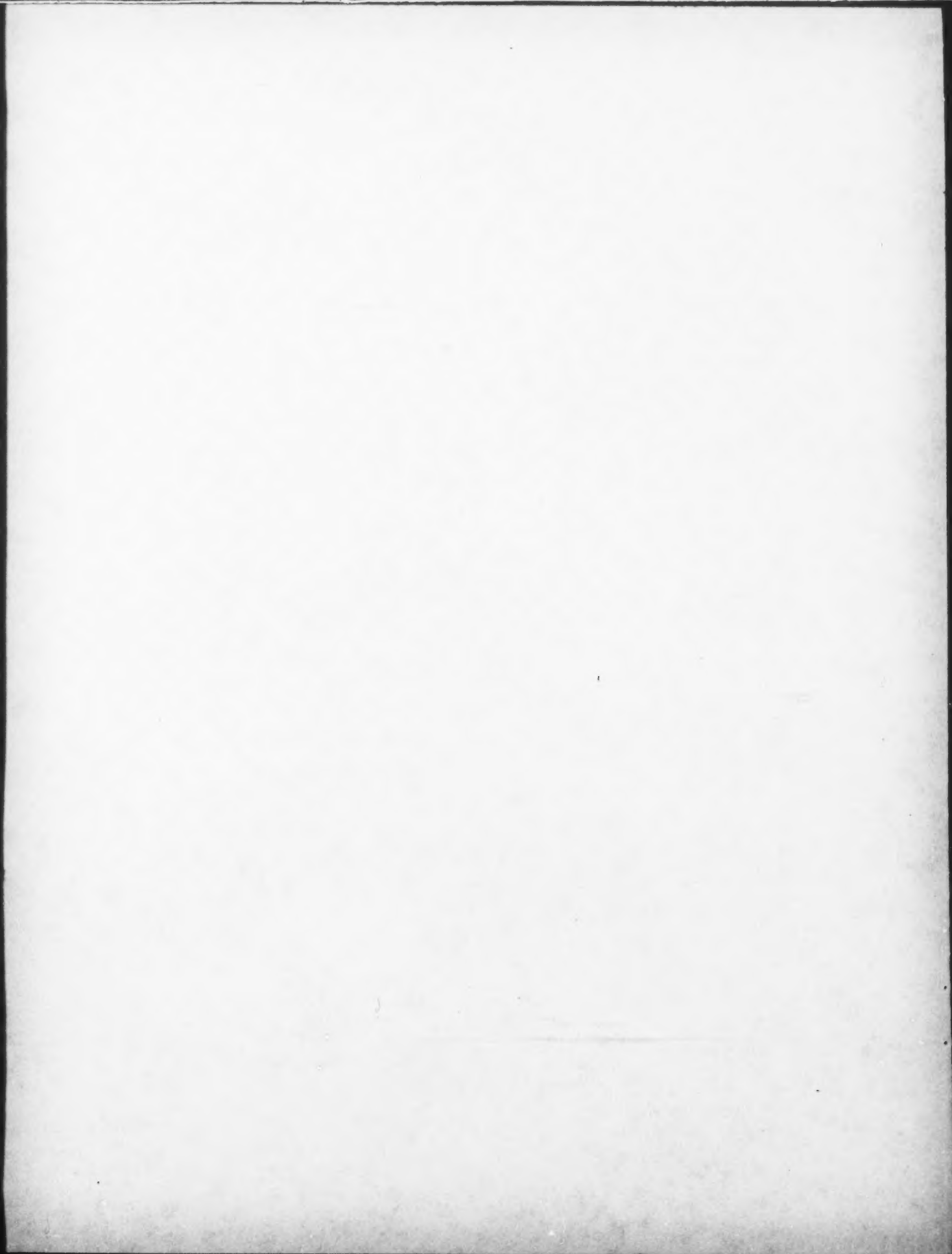


TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
FOREWORD.....	111	o Average Manhours	
ECONOMIC OUTLOOK - U. S.....	1	o Average Weekly Earnings	
		o Deflated Average Weekly Earnings	
HIGHLIGHTS VIRGINIA ECONOMIC INDICATORS, SECOND QUARTER 1989....	3	BUSINESS INDICATORS, JANUARY 1988 TO JUNE 1989.....	14
VIRGINIA INDICATORS, SECOND QUARTER DATA.....	4	o New Business Incorporations	
EMPLOYMENT INDICATORS, JANUARY 1988 TO JUNE 1989.....	6	o Valuation of Building Permits	
o Nonagricultural Wage & Salary Employment		o New Vehicle Registrations	
o Manufacturing Employment		BUSINESS INDICATORS (Continued)	
o Total Unemployment Rate		JANUARY 1988 to JUNE 1989.....	16
UNEMPLOYMENT INSURANCE INDICATORS, JANUARY 1988 TO JUNE 1989.....	8	o Electrical Power Sales	
o Average Weekly Initial Claims		o Taxable Retail Sales	
o Average Weekly Insured Unemployment (Percent)		o Value of Exports	
o U. I. Final Payments		DATA SUMMARY, JUNE 1989.....	18
MANUFACTURING PRODUCTION WORKER INDICATORS, JANUARY 1988 TO JUNE 1989.....	10	SUMMARY: MOVEMENT OF INDICATORS, JANUARY 1988 TO JUNE 1989.....	18
o Average Weekly Hours		DATA SUMMARY, APRIL AND MAY 1989.....	19
o Average Hourly Earnings		THE VIRGINIA LEADING AND COINCIDENT INDEXES.....	20
o Deflated Average Hourly Earnings		THE BIG COUNT: GEARING UP FOR THE 1990 BICENTENNIAL CENSUS...	22
PRODUCTION WORKER INDICATORS (Continued), JANUARY 1988 TO JUNE 1989.....	12	HISTORICAL SUMMARY, PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE.....	25

ECONOMIC OUTLOOK - U. S.

VOL. XXI, NO. 2

SECOND QUARTER DATA

Forecast Update

- o What happened to the widely forecast mid-1989 mild recession or soft landing--where did it go?
 - Recent revisions in U. S. economic data indicate the economy was SOMEWHAT STRONGER than had been thought in the first half of this year!
 - The substantial underreporting nationally of such key economic signposts as Gross National Product (GNP), employment, factory orders, and retail sales seems to have come about as the result of the impact of years of federal budget cuts on these statistical programs.
- o Real GNP growth in the second quarter was substantially revised upward from 1.7 percent to 2.5 percent.
 - Consumers have once again come to the rescue of a seemingly faltering economic expansion which began in November 1982 and is now the longest in peacetime history. Consumer spending in the second quarter at over two percent was nearly double the original estimate of 1.1 percent.
- o Behind the strength in consumer spending is:
 - The continued rise in personal income, reflecting the still very strong employment picture.

Monthly national increases in payroll employment in the second quarter averaged a hefty 224,000 after revisions.

- Three worries holding back consumer spending early this year have largely dissipated: (1) The Federal Reserve moved interest rates slightly lower at the first sign of a softening economy. (2) Oil prices have eased since the initial shock of the Alaskan oil spill and the North Sea explosion. (3) The memory of larger than usual April 15 income tax payments has now faded into the past.
- Auto sales, after lagging much of the 1989 model year, have revived as a result of low-cost financing and renewed rebates offered by the manufacturers. Also, car buyers now seem to be snapping up the remaining 1989s in dealers' stocks in order to avoid fairly hefty price increases on the 1990 models due in part to mandated additional safety equipment.
- o Other recent economic good news:
 - This summer's improved consumer spending did not occur at the expense of the savings rate which stayed at 5.7 percent in July. Again, this was a benefit of the strong income and employment picture.

- The merchandise trade deficit fell in July to a four and a half year low of \$8.2 billion due to moderate export growth and sharply reduced imports.
- In spite of the recent signs of strength in the economy, inflation has increased only modestly. The CPI rose only 0.2 percent in July. Large price increases in foods from last year's drought and in fuels from this spring's oil disasters seem to have by now worked through the economy.
- o With the U. S. economy churning along at a faster pace than expected at the same time that inflation is being held at bay, fears of a recession late this year or early in 1990 seem to have been largely laid to rest.
- o The disappearance of the 1989 economic slowdown will mean that the Federal Reserve will provide little further monetary ease in the near future. The recent strength of the dollar will have a negative impact on net exports meaning that there will be less rebound here than was formerly expected in 1990.
- o The economy now seems more likely to be headed on a path of slow (2.0 - 2.5 percent gain in GNP) but sustained growth for the next 15-18 months, as opposed to the earlier scenario of a growth recession in the last half of 1989 and the first half of 1990 followed by something of a rebound in the last half of 1990. A major reason the economy seems to be successfully walking the narrow line between recession and inflation is that the Federal Reserve has been applying just about the right combination of ease and restraint.

William F. Mezger

HIGHLIGHTS
VIRGINIA ECONOMIC INDICATORS
SECOND QUARTER 1989

- o During Second Quarter 1989, four Virginia economic indicator series set all-time records.
 - Nonagricultural wage and salary employment set another new record of 2,888,200 jobs in June.
 - Average hourly earnings of production workers reached new heights of \$9.56 per hour in May and \$9.60 per hour in June.
 - Average weekly earnings of factory workers climbed to a new high of \$393.57 in April.
 - New business incorporations soared to 1,922 in May.
- o Two of the unemployment-related series items exhibited their best performances in many years.
 - The total unemployment rate was at a 19-year low of 3.3 percent in April, the lowest level since October 1970 when the jobless rate was also 3.3 percent.
 - Final payments for unemployment insurance fell to a 15-year low of 1,414 in April, the best level since 1,280 in December 1974.
- o The Consumer Price Index for all Urban Consumers (CPI - U) averaged 123.7 (1982-4=100) in Second Quarter 1989. This was 1.6 percent higher than the 121.7 average of First Quarter 1989. The Second Quarter 1989 CPI average was 5.3 percent higher than the Second Quarter 1988 average of 117.5. This compared to a 3.9 percent second quarter to second quarter rise between 1987 and 1988. Prices in Second Quarter 1989 reflected the Alaskan and North Sea oil shocks and higher food prices because of the summer 1988 nationwide drought.
- o According to preliminary data from the Bureau of Labor Statistics (BLS) of the U. S. Department of Labor, productivity increased at a 0.9 percent annual rate during Second Quarter 1989 in the business sector as output rose 1.4 percent and hours of all persons engaged in the sector increased 0.4 percent (seasonally adjusted annual rates). These were the smallest increases in output and hours since 1986. The productivity growth estimate for First Quarter 1989 was substantially revised downward from the preliminary projection of 3.5 percent to 1.0 percent. In Second Quarter 1989, employment rose 0.9 percent and average weekly hours declined 0.4 percent. Hourly compensation increased at a 6.6 percent annual rate during Second Quarter 1989, compared with a 4.8 percent gain during the previous quarter. The second quarter increase was the largest since 1987.
- o The Virginia Division of Mines announced 1988 Virginia coal production achieved an all-time high of 46,536,420 tons, almost a million tons (two percent) more than 1987's record. As in previous years, three of Southwest Virginia's seven coal counties--Buchanan, Wise, and Dickenson--led the way with 87 percent of State coal production.

VIRGINIA INDICATORS SECOND QUARTER DATA

As has been the case in five of the last six quarters (Fourth Quarter 1988 was a little more positive than the others), the fifteen series used to measure the Virginia economy showed no strong directional movement in the second quarter. As in the first quarter, abnormal weather patterns seemed to affect the seasonal adjustment factors. This January and February were mild and dry causing more outside activities than usual. In March and early April when employment is usually picking up in Virginia, the weather was snowy and wet, delaying the spring back-to-work movement several weeks and causing a surge of backlogged activity in late April and early May. The rest of May and June saw a little bit higher than usual unemployment claims-related activities, again because of heavy rains in a normally drier period. Higher interest rates during much of the first half of 1989 also helped keep the lid on building permits, car sales, and taxable retail sales.

After March's weather-affected lackluster performance of only four series positive, ten negative, and one unchanged, April rebounded with the delayed spring activity, having nine series positive, only two negative, and four unchanged. May and June were unusually stable. May had four series up, six unchanged, and five down. June had five series up, four unchanged, and six down. Apparently, the then current news reports in the media about a suspected slowing in the national economy caused Virginia businessmen to be cautious.

Even with the so-so performance of the series in the second quarter, four

series still set all-time records and two other series made the best showings in a number of years. After little movement in April and May, nonagricultural wage and salary employment reached an all-time record of 2,888,200 jobs in June. Average hourly earnings climbed to record levels of \$9.56 per hour in May and \$9.60 per hour in June. Average weekly earnings hit a new record of \$393.57 in April. New business incorporations were at an all-time high of 1,922 in May. Also, the total unemployment rate was at a 19-year low of 3.3 percent in April, and unemployment insurance final payments were at a 15-year low of 1,414 in April.

The six-month moving average of rising indicators (page 18) serves to illustrate the quarter's performance. The moving average enhances analysis because it smoothes out much of the irregularity present in many of the individual series.

Six Series Set Records in Spite of An Overall Lackluster Performance.

The until recently robust employment series appeared to be mixed up by 1989's weather patterns. Nonagricultural wage and salary employment evidenced little movement in both April and May before increasing 0.5 percent to set a new record of 2,888,200 jobs in June. The seasonally adjusted March through May figures seemed to be overly influenced by the combination of a late, wet spring coming after a mild, dry winter. Factory employment, finishing the quarter at 427,200 in June, was unusually stable during the three-month period.

The weather's delay of the spring back-to-work movement also had an impact on the unemployment-related series. The total unemployment rate fell from 3.9 percent in March to 3.3 percent in April, the lowest level recorded in Virginia in 19 years, since October 1970 when the jobless rate was also 3.3 percent. At 3.5 percent and 3.6 percent, respectively, May's and June's jobless rates were just a little higher. Wet weather this spring caused just a few more initial claims in May and June after a good drop in April. The April insured unemployment rate was unchanged from March at 0.9 percent, dropped to 0.8 percent in May, and then was back at 0.9 percent by June. Final unemployment insurance payments, which to some extent reflect earlier layoffs, fell to 1,414 in April, the lowest level in nearly 15 years, since 1,280 in December 1974. Final payments then increased to 1,639 in May before decreasing to 1,545 in June.

The production worker indicators were unusually stable in May and June after small increases in April. While the workweek was reduced 0.3 hour during the quarter to 41.0 hours in June, Virginia factory workers were still averaging one hour of overtime per week. Average manhours also followed a similar pattern within a narrow range. Average hourly earnings did inch forward a few cents in May and June, setting all-time records at \$9.56 and \$9.60, respectively, after being unchanged at \$9.53 in April. Average weekly earnings rose to \$393.57 in April, then slid off to \$392.12 by June because of the slightly shorter workweek.

The five business-related series were overly positive each month of the second

quarter, but there were some divergences in the individual items. New business incorporations, which reflect businessmen's optimism about future prospects, fell from March's record of 1,904 to 1,501 in April, then rebounded to another new record of 1,922 in May before sliding to 1,626 in June. The volatile valuation of building permits issued showed some improvement throughout the quarter, rising from March's four-year low of \$125.9 million to a still unimpressive \$168.2 million by June. Higher interest rates in the first half of 1989, along with the wet spring, undoubtedly had a negative impact on future building plans although construction employment in Virginia remained at record levels this spring and summer.

New car sales were up 6.3 percent in April, then rose 5.1 percent in May before decreasing 5.3 percent in June to a moderate 35,765 vehicles. Higher interest rates plus market saturation kept car purchases somewhat below the 38,000+ vehicle sales levels of recent springs. It now appears a volley of new incentives by the manufacturers this summer has once again boosted car sales at the end of the model year. Electric power sales moved in a fairly narrow range, declining slightly from March's record of 4,355.9 million kilowatt hours in both April and May before rising to a respectable 4,286.9 million kilowatt hours in June. Taxable retail sales rose in April, fell in May, then regained much of the lost ground to finish the quarter at \$3,852.4 million in June.

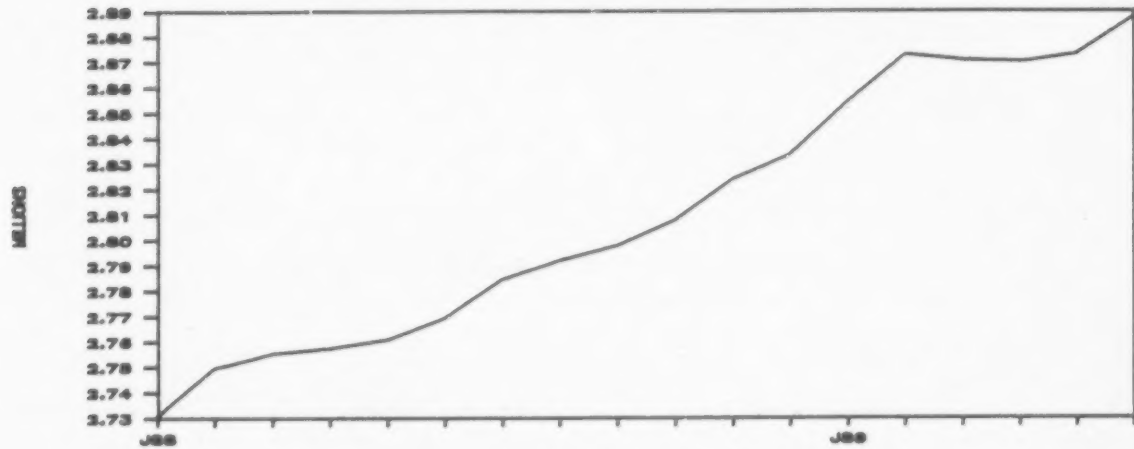
William F. Mezger

EMPLOYMENT INDICATORS
January 1988 to June 1989

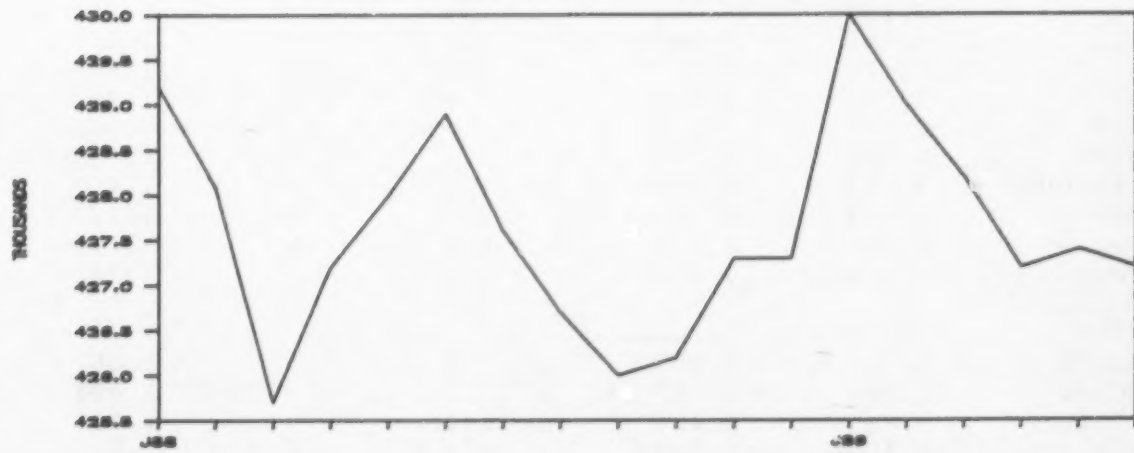
	Nonagricultural Wage and Salary Employment*		Manufacturing Employment*		Total Unemployment Rate*	
	(Thousands)		(Thousands)		(Percent)	
1988	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
January	2,683.6	2,731.2	425.7	429.2	4.4	4.0
February	2,696.4	2,750.0	425.6	428.1	4.0	3.7
March	2,725.2	2,755.7	423.6	425.7	3.8	3.7
April	2,750.0	2,757.9	425.2	427.2	3.8	3.8
May	2,773.5	2,761.3	425.7	428.0	3.5	3.6
June	2,801.3	2,769.8	429.1	428.9	3.7	3.7
July	2,790.2	2,785.1	426.3	427.6	3.5	3.6
August	2,793.0	2,792.5	428.2	426.7	3.8	4.0
September	2,813.6	2,798.3	429.4	426.0	4.1	4.4
October	2,829.9	2,808.4	429.2	426.2	3.7	3.9
November	2,849.4	2,824.6	430.3	427.3	4.0	4.1
December	2,860.7	2,834.2	429.0	427.3	4.1	4.1
1989						
January	2,805.0	2,854.9	426.6	430.0	4.3	3.9
February	2,817.1	2,873.2	426.5	429.0	4.5	4.2
March	2,839.1	2,870.8	426.1	428.2	4.1	3.9
April	2,862.3	2,870.2	425.2	427.2	3.3	3.3
May	2,886.2	2,873.6	425.1	427.4	3.4	3.5
June	2,920.8	2,888.2	427.3	427.2	3.6	3.6

* These series have been adjusted to First Quarter 1988 benchmarks.

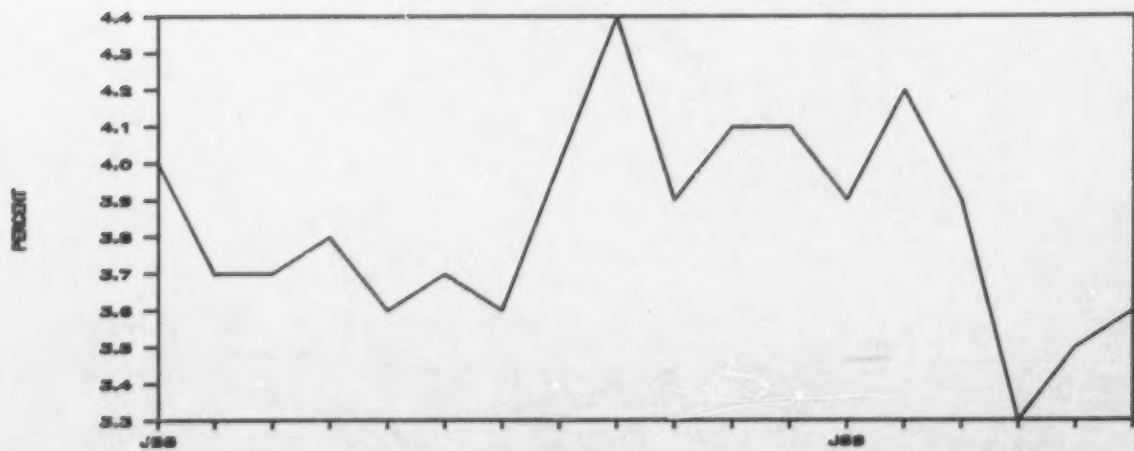
NONAG W & S EMPLOYMENT



MANUFACTURING EMPLOYMENT



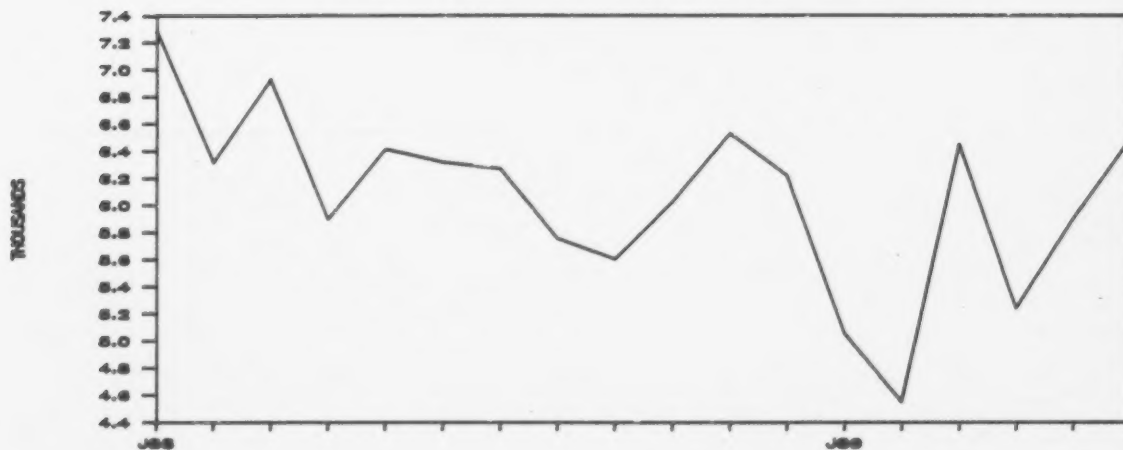
TOTAL UNEMPLOYMENT RATE



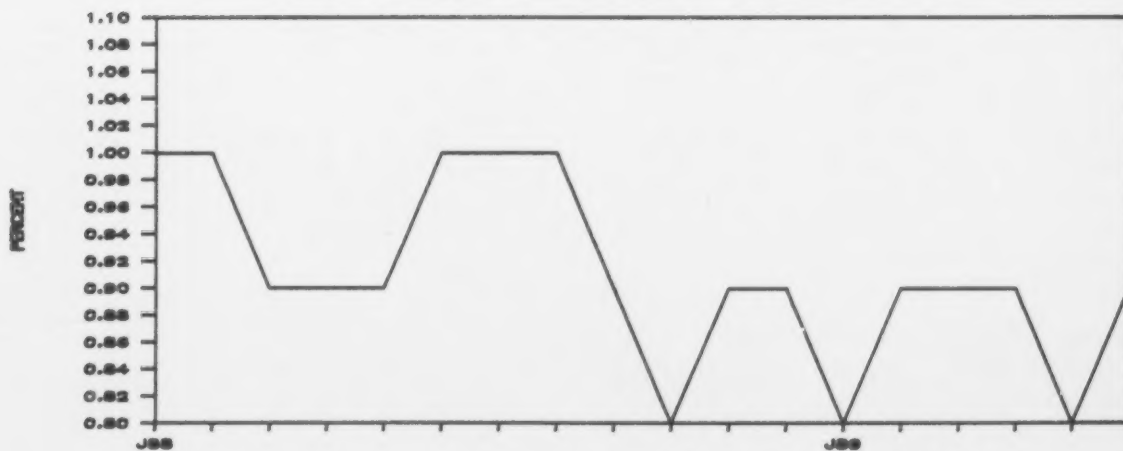
UNEMPLOYMENT INSURANCE INDICATORS
January 1988 to June 1989

	Average Weekly Initial Claims		Average Weekly Insured Unemployment (Percent)		Unemployment Insurance Final Payments	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	11,715	7,290	1.5	1.0	1,655	1,579
February	7,323	6,323	1.3	1.0	1,938	1,963
March	6,252	6,931	1.1	0.9	2,442	2,089
April	4,901	5,896	0.9	0.9	2,157	1,536
May	4,470	6,417	0.8	0.9	1,945	1,698
June	5,521	6,319	0.8	1.0	1,964	1,847
July	6,361	6,272	0.9	1.0	1,868	1,751
August	3,951	5,757	0.8	1.0	1,917	2,102
September	3,525	5,604	0.7	0.9	1,437	1,732
October	4,213	6,032	0.6	0.8	1,228	1,620
November	6,289	6,537	0.8	0.9	1,273	1,790
December	12,074	6,223	1.0	0.9	1,340	1,484
1989						
January	8,114	5,055	1.2	0.8	1,582	1,505
February	5,283	4,550	1.2	0.9	1,491	1,511
March	5,825	6,458	1.1	0.9	1,935	1,657
April	4,350	5,243	0.9	0.9	1,985	1,414
May	4,112	5,905	0.7	0.8	1,870	1,639
June	5,679	6,489	0.7	0.9	1,652	1,545

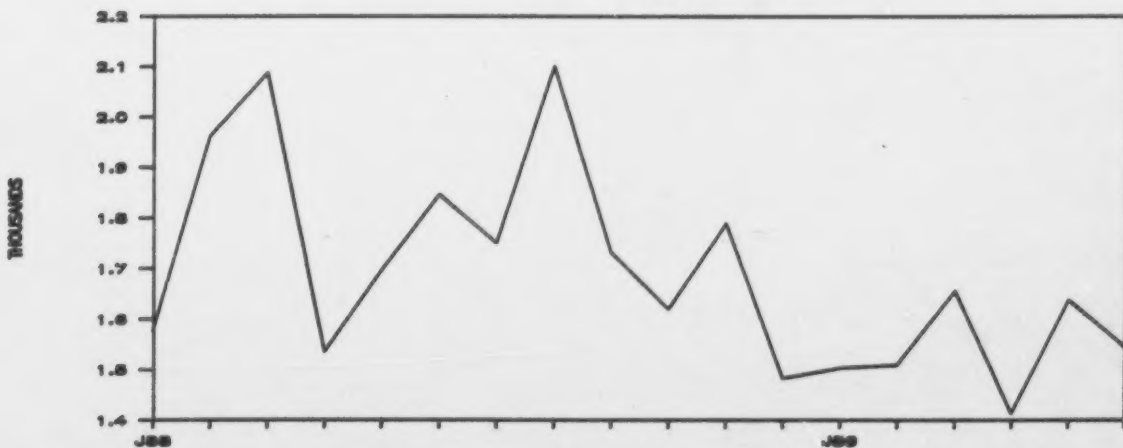
AVG. WEEKLY INITIAL CLAIMS



INSURED UNEMPLOYMENT RATE



U.I. FINAL PAYMENTS

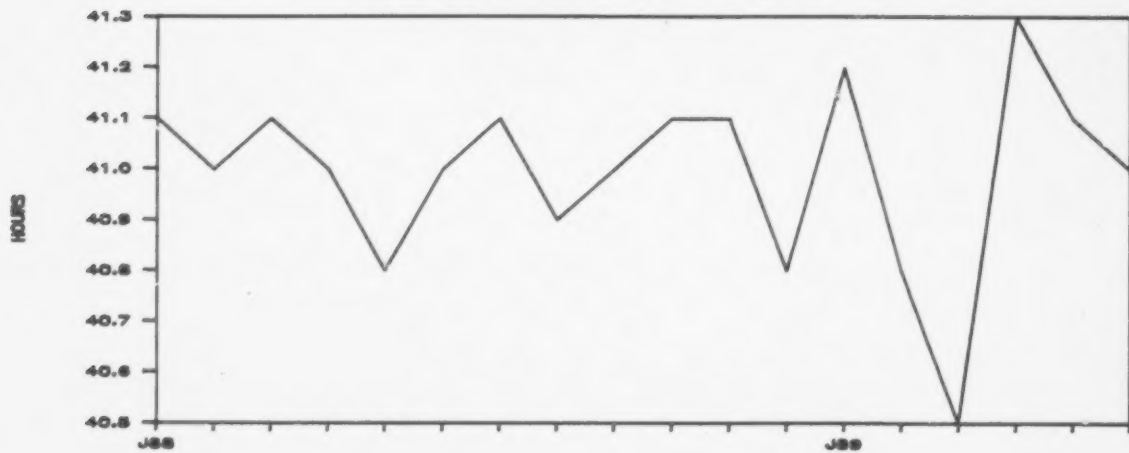


MANUFACTURING PRODUCTION WORKER INDICATORS
January 1988 to June 1989

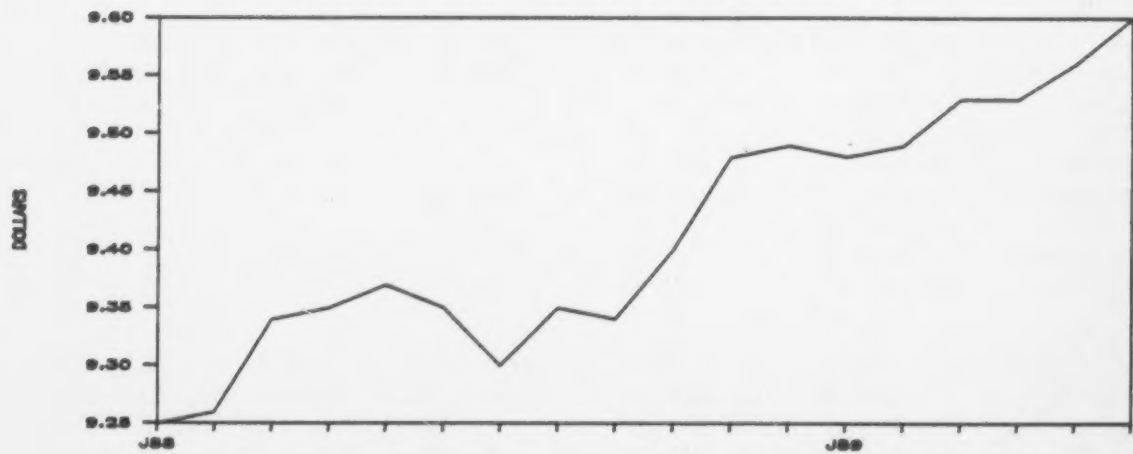
	Average Weekly Hours*		Average Hourly Earnings* (Dollars)		Deflated Average Hourly Earnings* (1982-84 Dollars)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	40.8	41.1	9.27	9.25	8.10	8.07
February	40.4	41.0	9.28	9.26	8.09	8.07
March	40.9	41.1	9.35	9.34	8.12	8.09
April	40.8	41.0	9.34	9.35	8.07	8.04
May	40.8	40.8	9.35	9.37	8.05	8.06
June	41.1	41.0	9.31	9.35	7.98	8.01
July	40.7	41.1	9.30	9.30	7.94	7.94
August	40.7	40.9	9.35	9.35	7.94	7.97
September	41.4	41.0	9.34	9.34	7.88	7.91
October	41.2	41.1	9.37	9.40	7.88	7.93
November	41.7	41.1	9.48	9.48	7.97	7.97
December	41.4	40.8	9.52	9.49	7.99	7.96
1989						
January	40.9	41.2	9.50	9.48	7.94	7.91
February	40.2	40.8	9.52	9.49	7.92	7.90
March	40.4	40.5	9.54	9.53	7.90	7.87
April	41.1	41.3	9.52	9.53	7.82	7.80
May	41.1	41.1	9.54	9.56	7.79	7.80
June	41.1	41.0	9.56	9.60	7.79	7.82

* These series have been adjusted to First Quarter 1988 benchmarks.

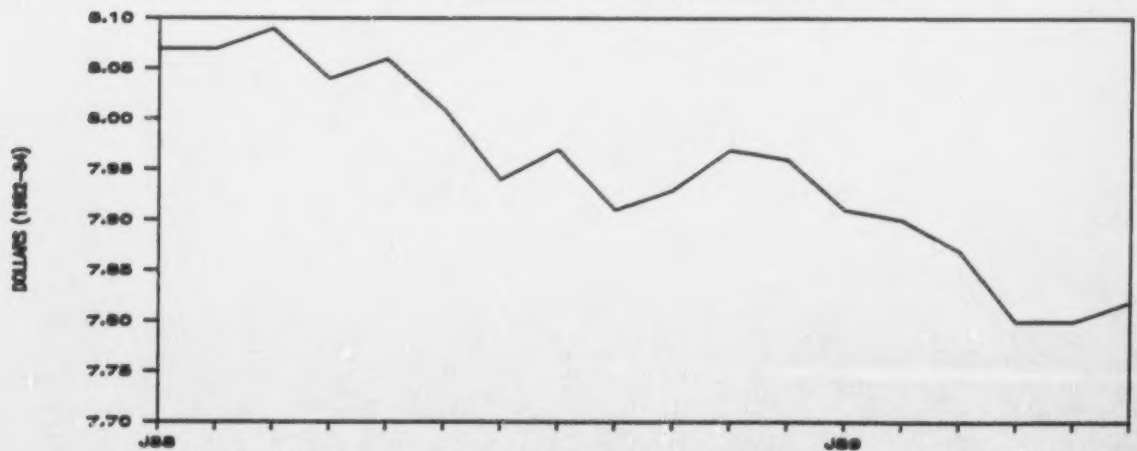
AVERAGE WEEKLY HOURS



AVERAGE HOURLY EARNINGS



AVG. HOURLY EARNINGS/CPI

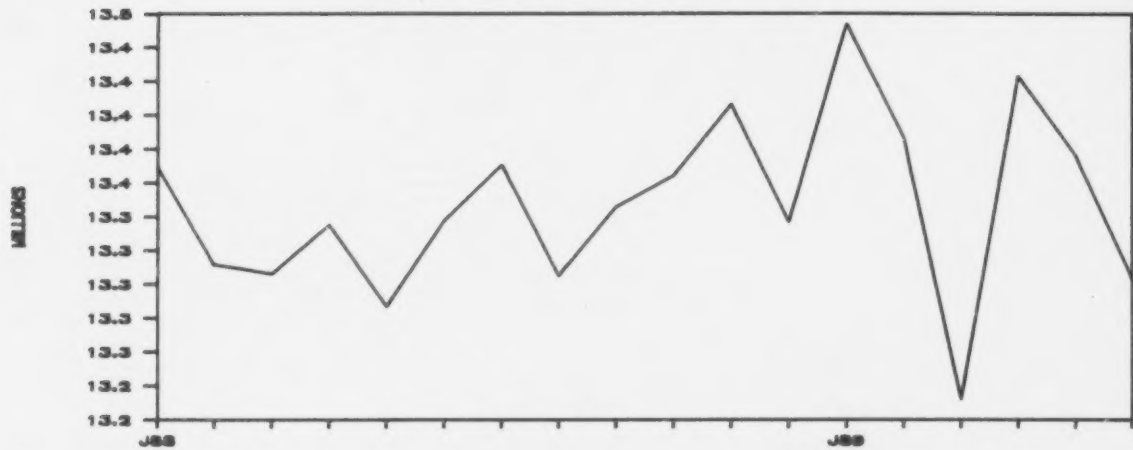


PRODUCTION WORKER INDICATORS (CONTINUED)
January 1988 to June 1989

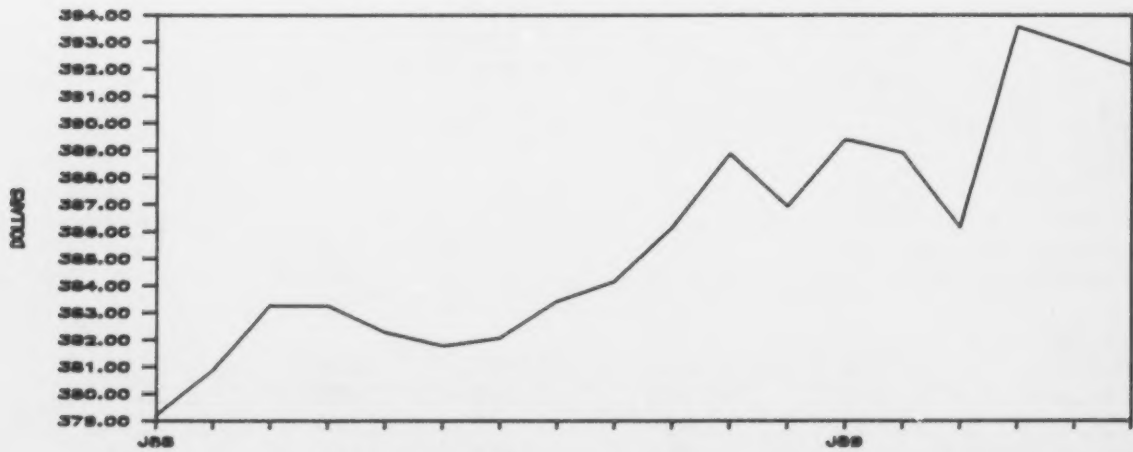
	Average Manhours* (Thousands)		Average Weekly Earnings* (Dollars)		Deflated Average Weekly Earnings* (1982-84 Dollars)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	13,215.1	13,369.2	378.22	379.22	330.32	331.12
February	13,007.5	13,311.8	374.91	380.90	326.86	331.06
March	13,182.1	13,306.1	382.42	383.29	332.25	331.57
April	13,207.0	13,335.6	381.07	383.27	329.36	329.59
May	13,223.3	13,286.9	381.48	382.28	328.30	328.79
June	13,415.0	13,338.2	382.64	381.78	327.88	327.75
July	13,203.1	13,371.1	378.51	382.09	322.96	326.27
August	13,280.4	13,305.4	380.55	383.46	323.32	326.25
September	13,597.2	13,346.4	386.68	384.19	326.31	325.23
October	13,497.1	13,364.9	386.04	386.17	324.68	325.40
November	13,685.9	13,406.9	395.32	388.88	332.20	328.38
December	13,541.9	13,336.9	394.13	386.93	330.65	324.35
1989						
January	13,306.2	13,454.2	388.55	389.41	324.60	325.31
February	13,080.0	13,387.0	382.70	388.90	318.39	322.55
March	13,114.1	13,232.2	385.42	386.15	319.06	318.28
April	13,295.4	13,423.7	391.27	393.57	321.24	321.45
May	13,311.8	13,376.8	392.09	392.86	320.07	320.51
June	13,377.0	13,304.0	392.92	392.12	319.97	319.97

* These series have been adjusted to First Quarter 1988 benchmarks.

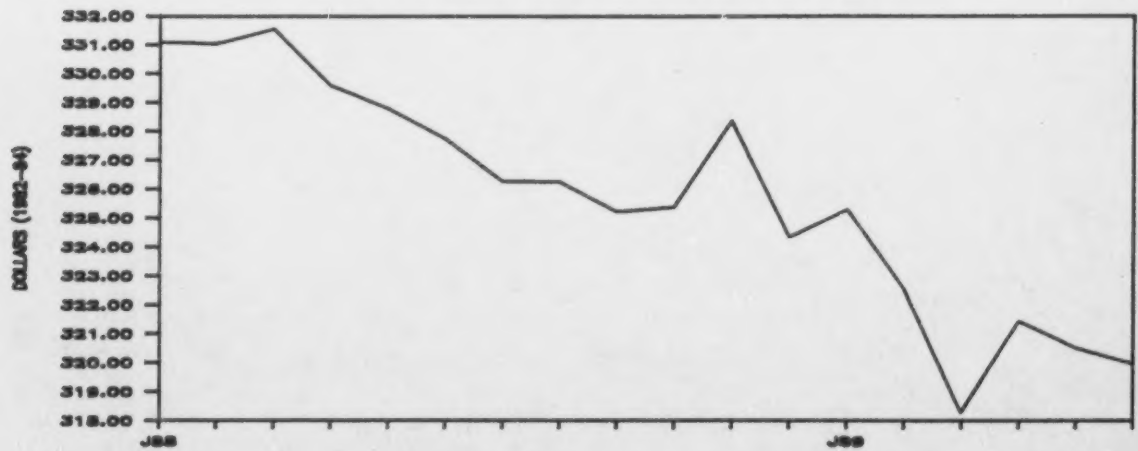
AVERAGE MANHOURS



AVERAGE WEEKLY EARNINGS



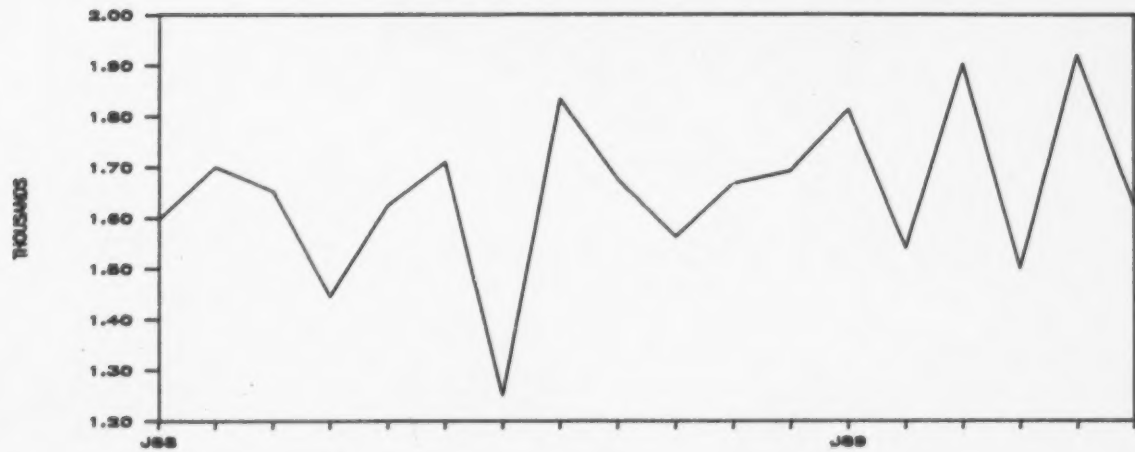
AVG. WEEKLY EARNINGS/CPI



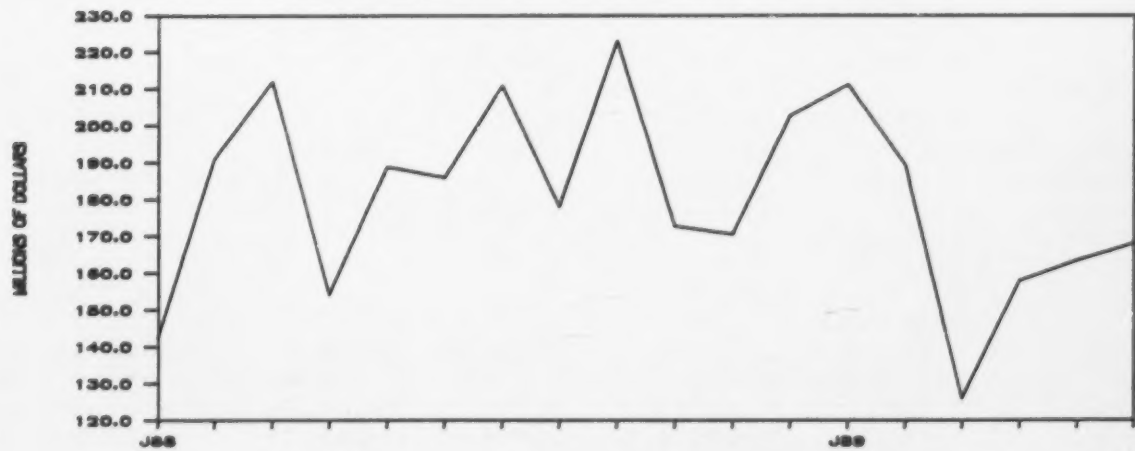
BUSINESS INDICATORS
January 1988 to June 1989

	New Business Incorporations		Valuation of Building Permits (\$ Millions)		New Vehicle Registrations	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	1,451	1,598	110.8	142.4	32,226	31,749
February	1,724	1,702	144.9	191.2	35,797	41,753
March	1,861	1,653	252.9	212.1	42,684	40,842
April	1,573	1,446	153.2	154.2	40,207	37,964
May	1,650	1,627	209.4	188.9	41,767	38,822
June	1,749	1,712	261.2	185.9	42,562	37,247
July	1,280	1,251	215.1	210.9	40,127	36,514
August	1,790	1,835	172.4	178.0	42,282	40,594
September	1,581	1,677	215.1	223.1	39,684	35,753
October	1,547	1,563	174.1	172.7	39,686	37,905
November	1,466	1,670	159.8	170.5	24,976	32,341
December	1,733	1,695	177.8	202.8	27,286	36,982
1989						
January	1,639	1,815	162.6	211.2	36,521	35,877
February	1,559	1,541	142.6	189.4	31,065	36,286
March	2,142	1,904	149.6	125.9	35,217	33,774
April	1,631	1,501	155.7	158.1	37,980	35,908
May	1,947	1,922	182.7	163.6	40,490	37,755
June	1,665	1,626	237.6	168.2	40,902	35,765

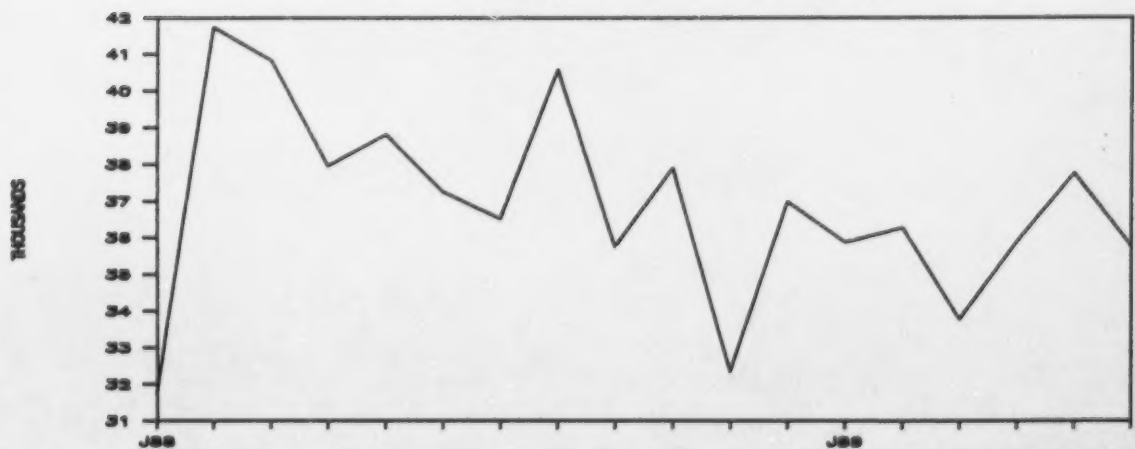
NEW BUSINESS INCORPORATIONS



VALUATION OF BUILDING PERMITS



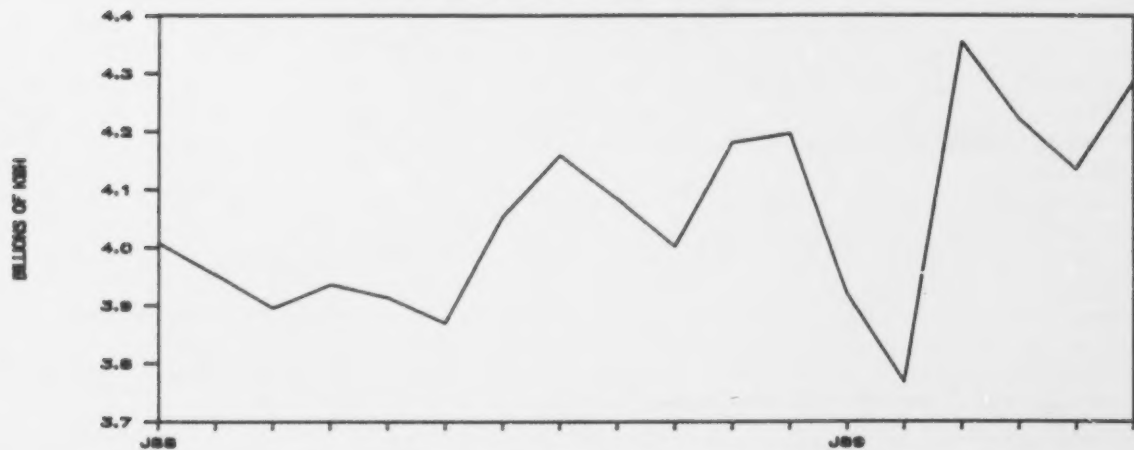
NEW VEHICLE REGISTRATIONS



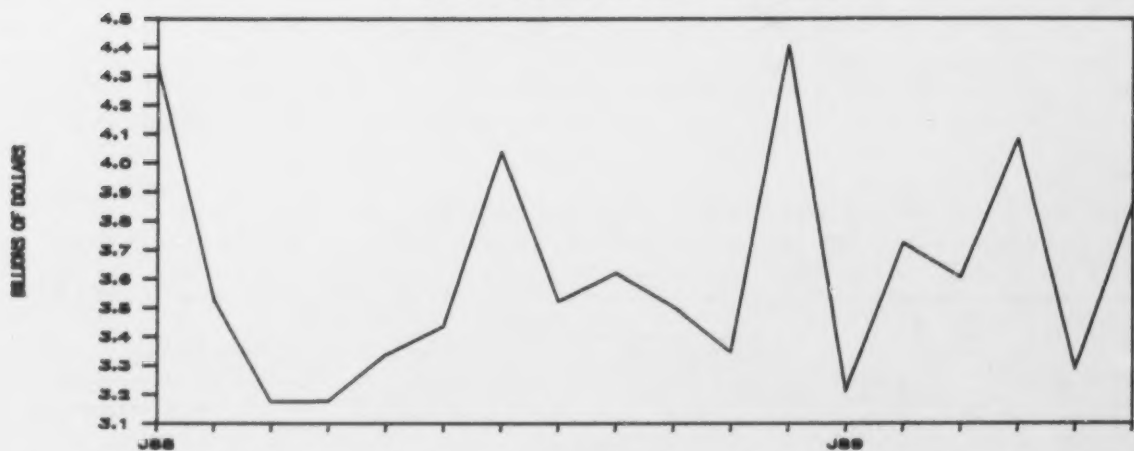
BUSINESS INDICATORS (CONTINUED)
January 1988 to June 1989

	Electrical Power Sales (Millions of KWH)		Taxable Retail Sales (Millions of Dollars)		Value of Exports (Millions of Dollars)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
1988						
January	4,709.7	4,008.7	3,781.8	4,338.8	480.9	n.a.
February	4,448.0	3,954.3	3,501.8	3,527.4	509.4	n.a.
March	4,008.3	3,896.8	2,935.0	3,174.7	649.7	n.a.
April	3,518.9	3,937.7	2,934.9	3,179.4	581.6	n.a.
May	3,251.7	3,914.0	3,570.8	3,340.4	582.2	n.a.
June	3,704.3	3,869.8	3,541.0	3,439.5	536.2	n.a.
July	4,382.5	4,054.4	4,034.6	4,040.3	595.6	n.a.
August	4,764.8	4,160.7	3,550.4	3,524.2	555.3	n.a.
September	4,200.1	4,084.8	3,705.1	3,622.5	635.2	n.a.
October	3,469.0	4,002.4	3,451.0	3,504.1	588.0	n.a.
November	3,608.6	4,183.0	3,462.9	3,347.0	525.7	n.a.
December	4,217.9	4,198.0	5,002.3	4,408.1	565.3	n.a.
1989						
January	4,602.7	3,919.6	2,795.4	3,210.4	508.6	n.a.
February	4,243.0	3,768.3	3,727.5	3,724.4	659.4	n.a.
March	4,486.8	4,355.9	3,329.1	3,604.6	743.6	n.a.
April	3,765.7	4,222.2	3,756.6	4,084.3	572.2	n.a.
May	3,431.2	4,135.8	3,515.0	3,287.2	641.7	n.a.
June	4,099.9	4,286.9	3,974.4	3,852.4	666.8	n.a.

ELECTRICAL POWER SALES

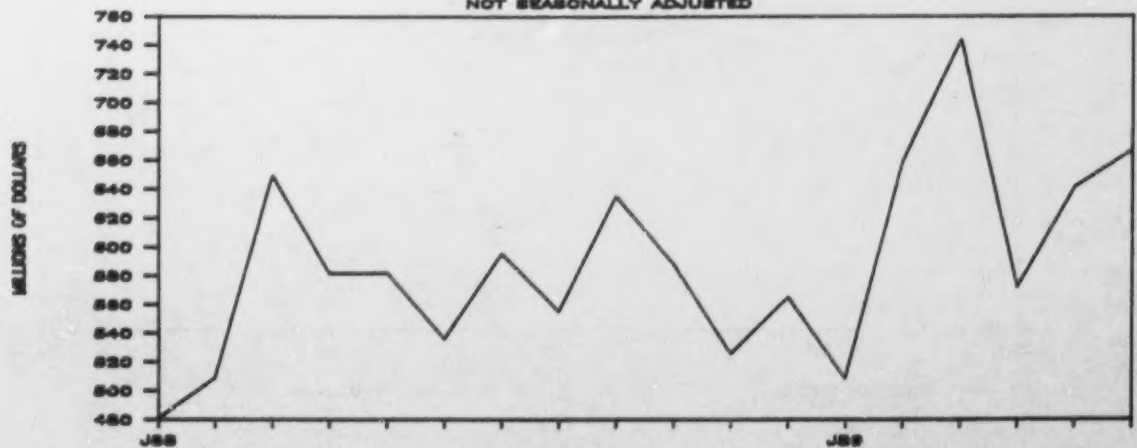


TAXABLE RETAIL SALES



VALUE OF EXPORTS

NOT SEASONALLY ADJUSTED

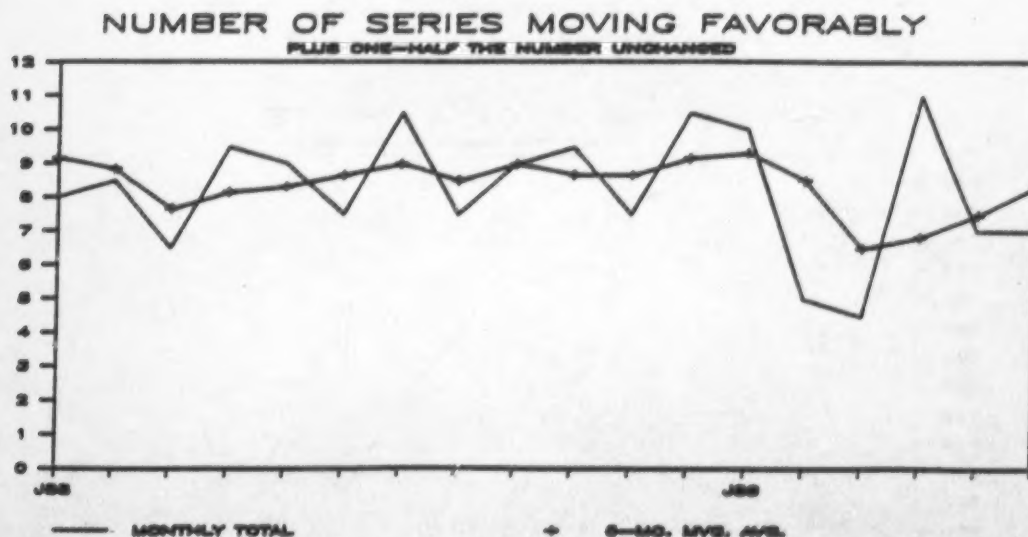


DATA SUMMARY	Percent & Direction** of Change					
	Jun. 1989	May. 1989	Jun. 1988	May. Jun. '89	Jun. '89	Jun. '88
(SEASONALLY ADJUSTED DATA)						
EMPLOYMENT						
*Nonag Wage & Salary Emp (000)	2,888.2	2,873.6	2,769.8	0.5 (+)	4.3 (+)	
*Manufacturing Employment (000)	427.2	427.4	428.9	-0.0 (0)	-0.4 (0)	
*Total Unemployment Rate	3.6	3.5	3.7	(-)	(+)	
UNEMPLOYMENT INSURANCE						
Average Weekly Initial Claims	6,489	5,905	6,319	9.9 (-)	2.7 (-)	
Insured Unemployment Rate (%)	0.9	0.8	1.0	12.5 (-)	(+)	
Final Payments	1,545	1,639	1,847	-5.7 (+)	-16.4 (+)	
MANUFACTURING PRODUCTION WORKERS						
*Average Weekly Hours	41.0	41.1	41.0	-0.2 (0)	0.0 (0)	
*Average Manhours (000)	13,304	13,377	13,338	-0.5 (-)	-0.3 (0)	
*Average Hourly Earnings (\$)	9.60	9.56	9.35	0.4 (0)	2.7 (+)	
*Average Weekly Earnings (\$)	392.12	392.86	381.78	-0.2 (0)	2.7 (+)	
BUSINESS						
New Business Incorporations	1,626	1,922	1,712	-15.4 (-)	-5.0 (-)	
Valuation of Bldg Permits (\$M)	168.2	163.6	185.9	2.8 (+)	-9.5 (-)	
New Vehicle Registrations	35,765	37,755	37,247	-5.3 (-)	-4.0 (-)	
Electrical Pwr Sales (M of KWH)	4,287	4,136	3,870	3.7 (+)	10.8 (+)	
Taxable Retail Sales (\$M)	3852.4	3287.2	3439.5	17.2 (+)	12.0 (+)	

* Revised to First Quarter 1988 benchmarks.

** (+) Favorable, (-) Not Favorable, (0) Change less than 0.5%.

SUMMARY



DATA SUMMARY					Percent & Direction** of Change	
	May.	Apr.	May.	Apr.	'89- May.	'88- May.
MAY 1989 (SEASONALLY ADJUSTED DATA)	1989	1989	1988	May.	'89	'89
EMPLOYMENT						
*Nonag Wage & Salary Emp (000)	2,873.6	2,870.2	2,761.3	0.1	(0)	4.1 (+)
*Manufacturing Employment (000)	427.4	427.2	428.0	0.0	(0)	-0.1 (0)
*Total Unemployment Rate	3.5	3.3	3.6		(-)	(+)
UNEMPLOYMENT INSURANCE						
Average Weekly Initial Claims	5,905	5,243	6,417	12.6	(-)	-8.0 (+)
Insured Unemployment Rate (%)	0.8	0.9	0.9		(+)	(+)
Final Payments	1,639	1,414	1,698	15.9	(-)	-3.5 (+)
MANUFACTURING PRODUCTION WORKERS						
*Average Weekly Hours	41.1	41.3	40.8	-0.5	(0)	0.7 (+)
*Average Manhours (000)	13,377	13,424	13,287	-0.3	(0)	0.7 (+)
*Average Hourly Earnings (\$)	9.56	9.53	9.37	0.3	(0)	2.0 (+)
*Average Weekly Earnings (\$)	392.86	393.57	382.28	-0.2	(0)	2.8 (+)
BUSINESS						
New Business Incorporations	1,922	1,501	1,627	28.0	(+)	18.1 (+)
Valuation of Bldg Permits (\$M)	163.6	158.1	188.9	3.5	(+)	-13.4 (-)
New Vehicle Registrations	37,755	35,908	38,822	5.1	(+)	-2.7 (-)
Electrical Pwr Sales (M of KWH)	4,136	4,222	3,914	-2.0	(-)	5.7 (+)
Taxable Retail Sales (\$M)	3287.2	4084.3	3340.4	-19.5	(-)	-1.6 (-)

DATA SUMMARY					Percent & Direction** of Change	
	Apr.	Mar.	Apr.	Mar.	89- Apr.	'88- Apr.
APRIL 1989 (SEASONALLY ADJUSTED DATA)	1989	1988	1988	Apr.	'89	'89
EMPLOYMENT						
*Nonag Wage & Salary Emp (000)	2,870.2	2,870.8	2,757.9	-0.0	(0)	4.1 (+)
*Manufacturing Employment (000)	427.2	428.2	427.2	-0.2	(0)	0.0 (0)
*Total Unemployment Rate	3.3	3.9	3.8		(+)	(+)
UNEMPLOYMENT INSURANCE						
Average Weekly Initial Claims	5,243	6,458	5,896	-18.8	(+)	-11.1 (+)
Insured Unemployment Rate (%)	0.9	0.9	0.9		(0)	(0)
Final Payments	1,414	1,657	1,536	-14.7	(+)	-7.9 (+)
MANUFACTURING PRODUCTION WORKERS						
*Average Weekly Hours	41.3	40.5	41.0	2.0	(+)	0.7 (+)
*Average Manhours (000)	13,424	13,232	13,336	1.4	(+)	0.7 (+)
*Average Hourly Earnings (\$)	9.53	9.53	9.35	0.0	(0)	1.9 (+)
*Average Weekly Earnings (\$)	393.57	386.15	383.27	1.9	(+)	2.7 (+)
BUSINESS						
New Business Incorporations	1,501	1,904	1,446	-21.2	(-)	3.8 (+)
Valuation of Bldg Permits (\$M)	158.1	125.9	154.2	25.6	(+)	2.5 (+)
New Vehicle Registrations	35,908	33,774	37,964	6.3	(+)	-5.4 (-)
Electrical Pwr Sales (M of KWH)	4,222	4,356	3,938	-3.1	(-)	7.2 (+)
Taxable Retail Sales (\$M)	4084.3	3604.6	3179.4	13.3	(+)	28.5 (+)

* Revised to First Quarter 1988 benchmarks.

** (+) Favorable, (-) Not Favorable, (0) Change less than 0.5%.

THE VIRGINIA LEADING AND COINCIDENT INDEXES

	Leading Index (82-84=100)	Monthly Percent Change	Quarterly Percent Change	Coincident Index (82-84=100)	Monthly Percent Change	Quarterly Percent Change
January, 1988	131.28	-2.6		123.66	+0.4	
February	130.97	-0.2	-3.0	124.69	+0.8	+2.1
March	132.18	+0.9		125.65	+0.7	
April	132.87	+0.5		126.28	+0.4	
May	132.77	-0.0	+1.4	126.49	+0.1	+1.3
June	134.68	+1.4		126.42	-0.0	
July	135.49	+0.6		127.25	+0.6	
August	135.79	+0.2	+1.9	125.97	-1.0	-0.5
September	136.67	+0.6		123.72	-1.7	
October	137.82	+0.8		123.00	-0.5	
November	136.62	-0.8	+0.7	123.10	+0.0	-1.7
December	136.46	-0.1		124.33	+1.0	
January, 1989	138.97	+1.8		124.32	-0.0	
February	140.02	+0.7	+1.2	124.13	-0.1	+0.6
March	137.02	-2.1		124.23	+0.0	
April	136.04	-0.7		125.86	+1.3	
May	135.30	-0.5	-2.6	127.75	+1.5	+2.7
June	133.69	-1.1		129.15	+1.0	

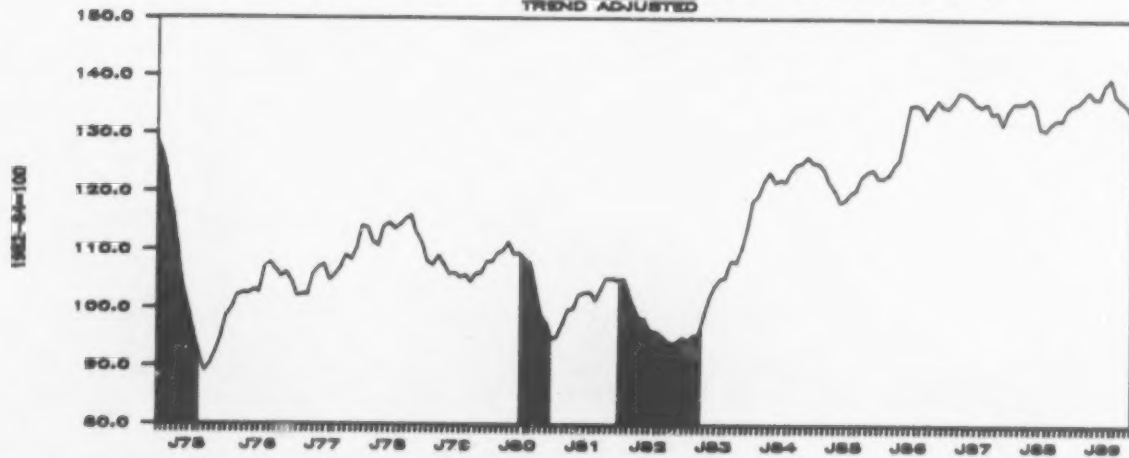
The Virginia Leading Index has been adjusted to a 1982-84 base and includes Average Weekly Hours for Production Workers; New Businesses; Valuation of Building Permits, deflated to 1982-84 dollars; and Average Weekly Initial Claims. The Virginia Coincident Index has been changed to allow better utilization of monthly data. The Index includes Nonagricultural Wage and Salary Employment; Total Unemployment Rate; Taxable Retail Sales, deflated to 1982-84 dollars; and Average Hourly Earnings of Manufacturing Production Workers, deflated to 1982-84 dollars. The Coincident Index also uses a 1982-84 base. All series are adjusted for seasonality and month of cyclical dominance.

The losses in the Leading Index principally stemmed from the slight increase in seasonally adjusted claims activity from the very low values of the first quarter. Other components were mixed in their month-to-month change causing an overall decline in the index from the high first quarter values.

The continued low Unemployment Rate fueled a growth in the Coincident Indicators. This index also had its components sending mixed signals as the Average Hourly Earnings of Manufacturing Workers declined.

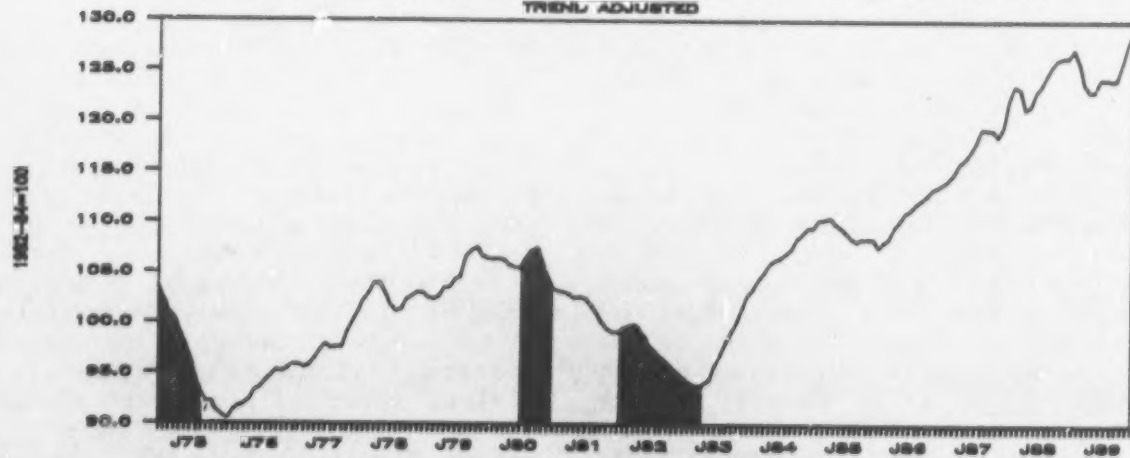
VIRGINIA INDEX OF LEADING INDICATORS

TREND ADJUSTED



VIRGINIA INDEX OF COINCIDENT INDICATORS

TREND ADJUSTED



THE BIG COUNT: GEARING UP FOR THE 1990 BICENTENNIAL CENSUS

EDITOR'S NOTE: With the upcoming 1990 Census--the biggest event in some time in the economics and statistical world--we will feature articles about the Census by the Virginia State Data Center (SDC) in this and the next issues of Economic Indicators. The SDC has been a part of the Virginia Employment Commission since July 1988.

Sunday, April 1, 1990.

That's the national "Census Day" in American History. It marks the final phase of the nation's most important once-every-ten-year statistical project: the Decennial Census of Population and Housing.

It's the day when the U. S. Bureau of the Census will start painting America's portrait by collecting numbers from an estimated 106 million housing units and some 250 million people living in them. Virginia's portion will include over two million households with approximately 6,200,000 persons.

The basic reason for taking the 21st Census is the same as cited 200 years ago in Article 1, Section 2 of the U. S. Constitution: to provide the facts needed to divide the seats in the House of Representatives fairly among the states based on population, reflecting changes during the previous decade. Census numbers also are used to redraw state and local legislative districts.

Beyond political representation, however, there is a great deal of federal and state money at stake in the final Census numbers. Despite recent cutbacks, billions of federal dollars for a wide range of programs are redistributed to local governments based on population, age, income, and other Census statistics. In Virginia, over 600 million dollars in federal funds are distributed to the state and local

governments each year based on Census numbers.

Not only do the Census counts translate into government dollars for every community, they also are used for planning and improving public facilities and programs. State and local government planners use Census facts to establish long-range community plans, to develop capital improvement programs, to help locate new schools, to improve nutrition programs, to set up day-care centers and health clinics where they are most needed, to develop facilities for older people, and to provide better transportation.

But the impact of 1990 Census statistics will reach far beyond government information needs. Business and industry will use the data for planning the production and sale of goods and services--where they should open new facilities, relocate or expand, what sales volume they might expect, what prices the market will bear, and how they should advertise.

Results from the next Census will provide detailed, timely demographic and socioeconomic information for the nation and its regions, states, counties, cities, towns, minor civil divisions, and other geographic areas down to the Census block level. The information will be provided in a wide variety of formats to meet the needs of data users, including: printed reports, summary computer tapes and diskettes,

microfiche, maps and charts, and perhaps even compact data discs.

In Virginia, the lead agency for the Census is the SDC program housed within the Virginia Employment Commission (VEC). The Center for Public Service of the University of Virginia, the State Library, and the 22 Planning District Commissions also are participants in the SDC program. During the month of September, the VEC, assisted by the Center for Public Service and the Census Bureau, held six local government training sessions across the state.

In upcoming months the SDC will be further involved in a number of precensus and postcensus activities such as the Census Designated Place Program to identify local unincorporated places for Census tabulations. The SDC will also have a major responsibility in Virginia for dissemination of Census products and publications as postcensus data becomes available during the early and mid-1990s.

Public awareness will be heightened by such activities as public service announcements, posters, brochures, newsletter articles, and brief written messages.

There will be two Census forms in 1990. The short form, taking about 15 minutes to fill out, contains 14 basic population and housing questions. Five out of every six households will receive this short questionnaire. Questions asked will include age, sex, marital status, and household relationship for each person in the household. Several questions about the housing unit also will be on the basic form.

The remaining 17 percent of the households will get a longer form that may take about 45 minutes to complete. The long form contains the basic questions plus additional ones about the demographic and socioeconomic

characteristics of each household member, as well as some additional housing questions. These long-form-only questions request information on income, ancestry, occupation, education, travel to work, and housing costs. The information from this large sample will be statistically inflated to depict the entire population.

Processing and tabulation of the more than 106 million questionnaires will occur in seven processing centers between April and October 1990 in order to report the count for each state to the President by December 31, 1990, as required by law. These counts are for reapportioning seats in the House of Representatives, called for by the Constitution. Then by April 1, 1991, just a year after Census Day, the Census Bureau will make available to state officials the small-area counts needed to carry out redrawing state and local election district and legislative boundaries.

Response to the Census is required by law--specifically, Title 13, United States Code. By this same law, information furnished on Census report forms is kept strictly confidential. The law requires that information obtained from an individual be used for statistical purposes only. It clearly states that individual U. S. Census reports cannot be used for purposes of taxation, investigation, or regulation. (For example, the Census questionnaire does not ask for Social Security numbers.) The law also requires that published data be in such a format that it is not possible to identify an individual, household, or housing unit or a single business establishment.

Underlying all these preparations and improvements for 1990 is the awareness by both the public and private sectors of the need for more accurate, complete, and timely statistical data.

Larry E. Robinson

HISTORICAL SUMMARY

PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE

GENERAL INFORMATION

For those interested in studying the business cycle in Virginia, this publication includes several of the economic time series for which data is readily available on a monthly basis. From time to time, new series will be added and, if necessary, others presently included will be discontinued.

Business Cycle Turning Points

The shaded spaces on the charts represent the 1973-75, 1980, and 1981-82 recessions as designated by the National Bureau of Economic Research (NBER). The beginning of a recession is defined as the month when aggregate economic activity in the U. S. reaches a cyclical high, from which it begins to turn down, and the end as the month when it reaches a cyclical low, from which it begins to turn up. According to NBER, the 1973-75 recession began in November 1973 and ended in March 1975, the 1980 recession began in January 1980 and ended in July 1980, and the 1981-82 recession began in July 1981 and ended in November 1982.

Seasonal Adjustment

To correlate changes in a time series and changes in the business cycle it is

desirable to eliminate, insofar as possible, the effect of irrelevant factors from the data comprising the series. All series currently published in Indicators have been adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle.

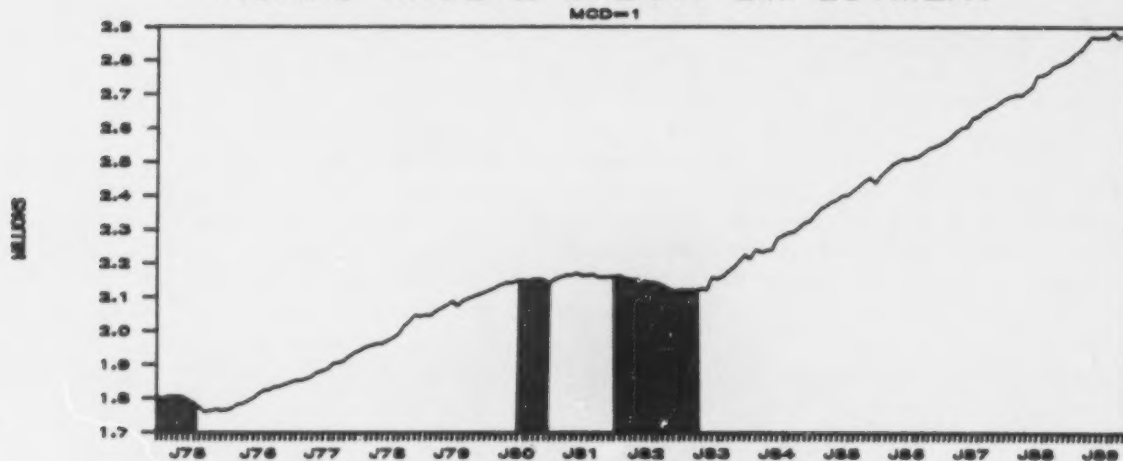
Months for Cyclical Dominance (MCD)

After seasonal adjustment there often remains a significant degree of purely random change, the effect of which can be minimized with a moving average equal in length to the MCD of the series. The MCD is an estimate of the length of the moving average which will reveal the cyclical pattern among the welter of random fluctuations in the data--the greater the MCD the more random and less cyclically significant are monthly changes in the series. Where noted, charts of historical data in this publication represent seasonally adjusted figures which have been averaged according to the MCD of each series.

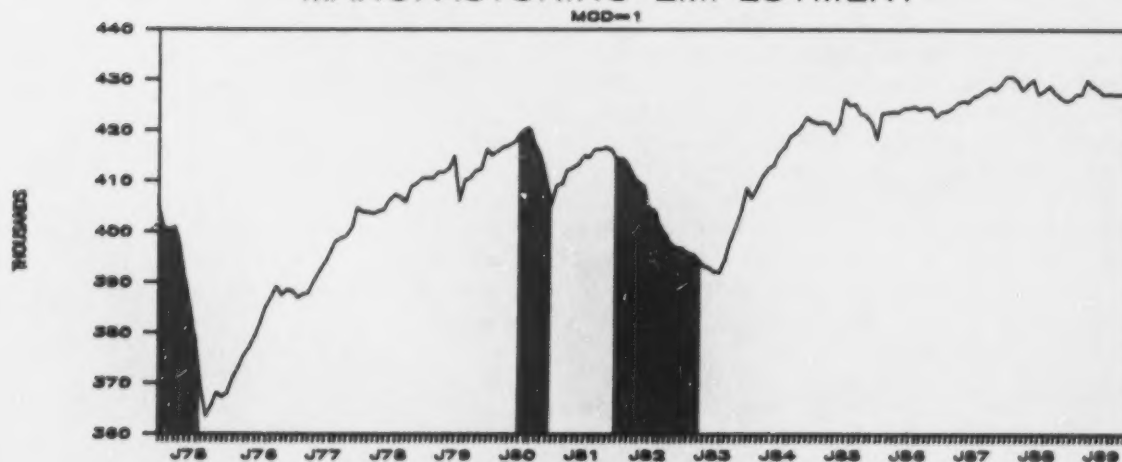
DATA SOURCES

Nonagricultural Wage and Salary Employment.....	Virginia Employment Commission (VEC)
Manufacturing Employment.....	VEC
Total Unemployment Rate.....	VEC
Average Weekly Initial Claims.....	VEC
Insured Unemployment Rate.....	VEC
Unemployment Insurance Final Payments.....	VEC
Average Manhours.....	VEC
Average Hourly Earnings.....	VEC
Average Weekly Earnings.....	VEC
Average Workweek.....	VEC
Average Hourly Earnings/CPI.....	VEC
Average Weekly Earnings/CPI.....	VEC
New Business Incorporations.....	Virginia State Corporation Commission
Valuation of Building Permits - 18 Cities.....	Local Building Inspectors
New Vehicle Registrations.....	Virginia State Department of Motor Vehicles
Electrical Power Sales.....	Virginia Power, Appalachian Power Co., Delmarva Electric Co., Tennessee Power Company
Taxable Retail Sales.....	Virginia State Department of Taxation
Taxable Retail Sales/CPI.....	Virginia State Department of Taxation

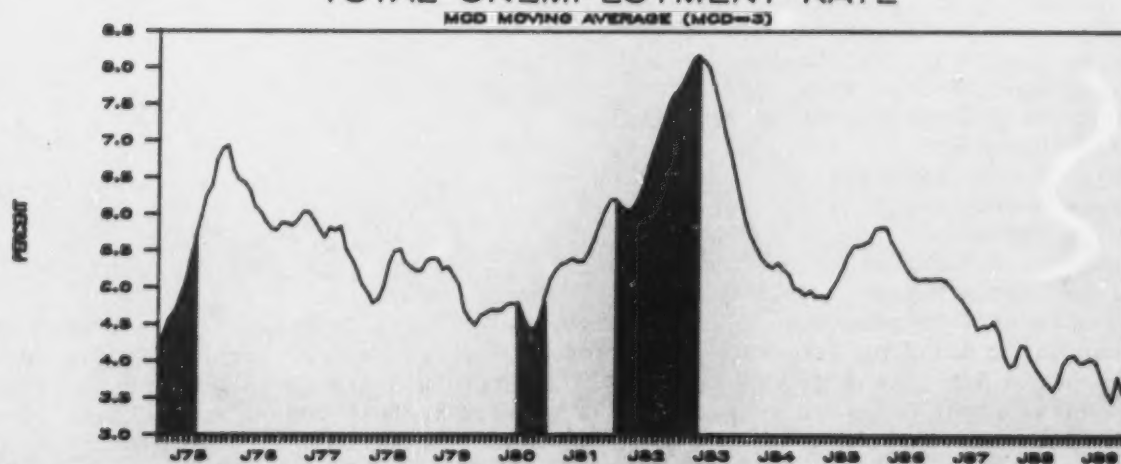
NONAG WAGE & SALARY EMPLOYMENT



MANUFACTURING EMPLOYMENT

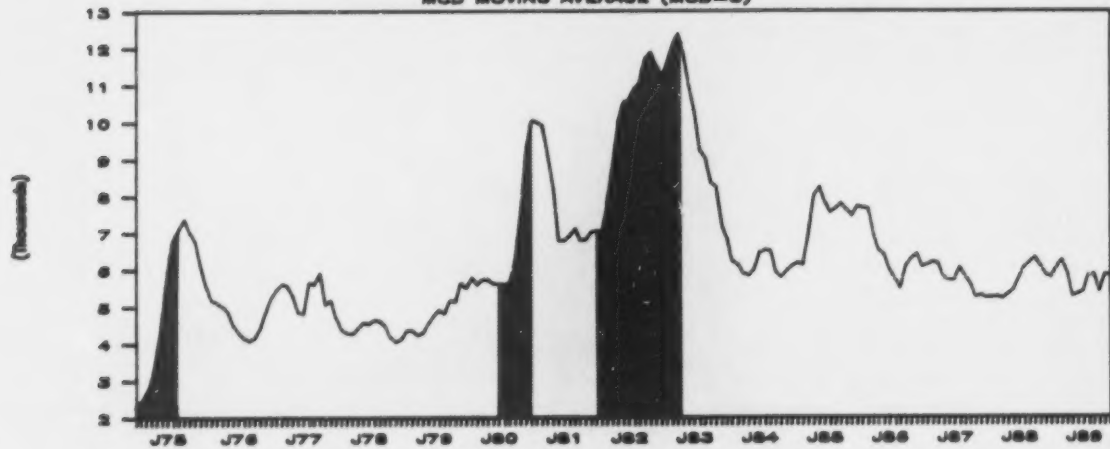


TOTAL UNEMPLOYMENT RATE



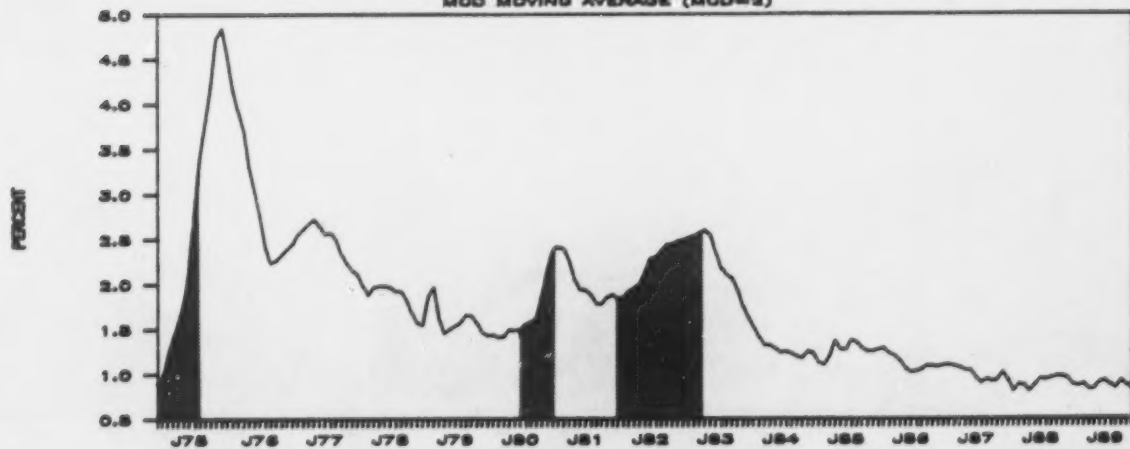
AVERAGE WEEKLY INITIAL CLAIMS

MCD MOVING AVERAGE (MCD=3)



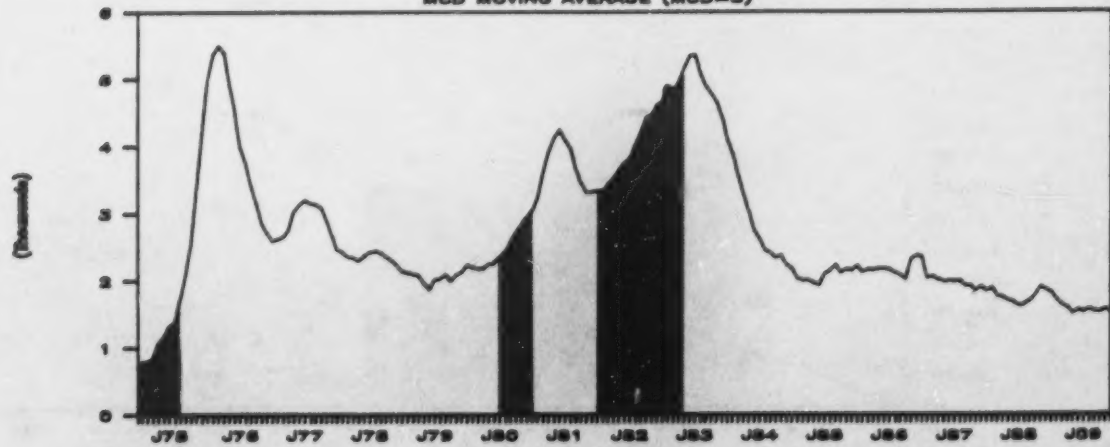
INSURED UNEMPLOYMENT RATE

MCD MOVING AVERAGE (MCD=3)

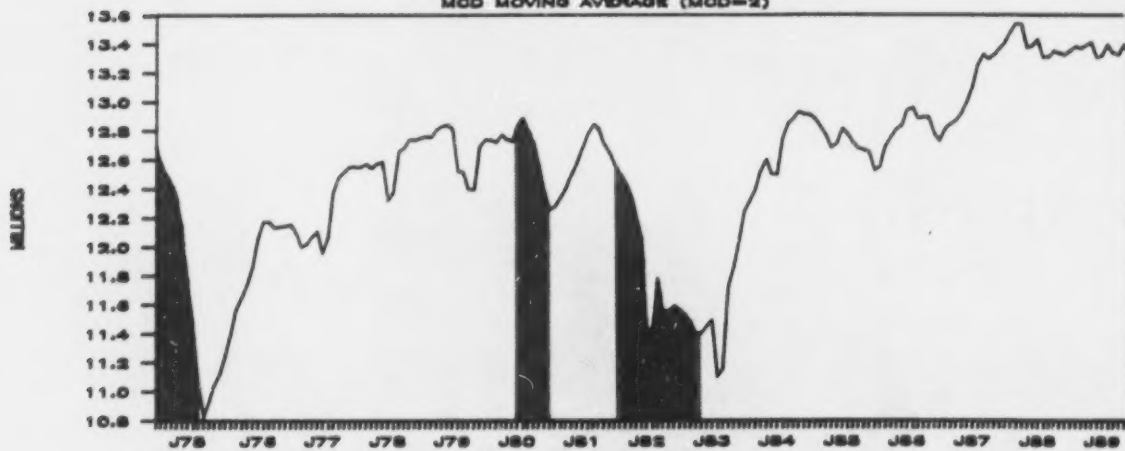


U. I. FINAL PAYMENTS

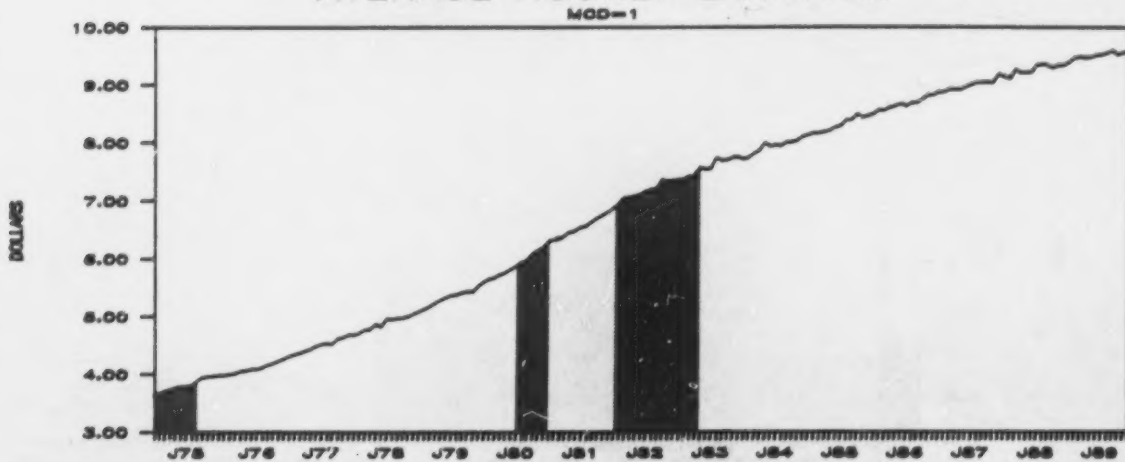
MCD MOVING AVERAGE (MCD=3)



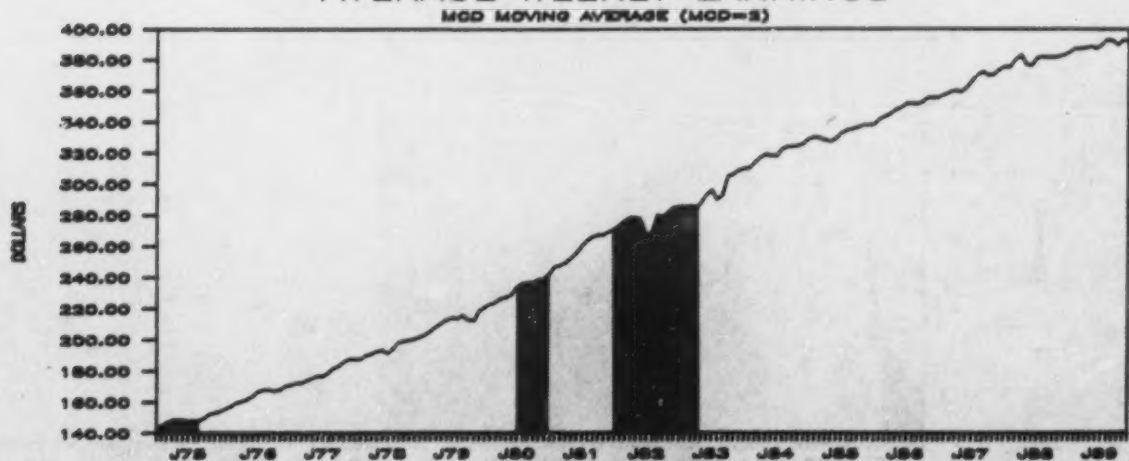
AVERAGE MANHOURS



AVERAGE HOURLY EARNINGS

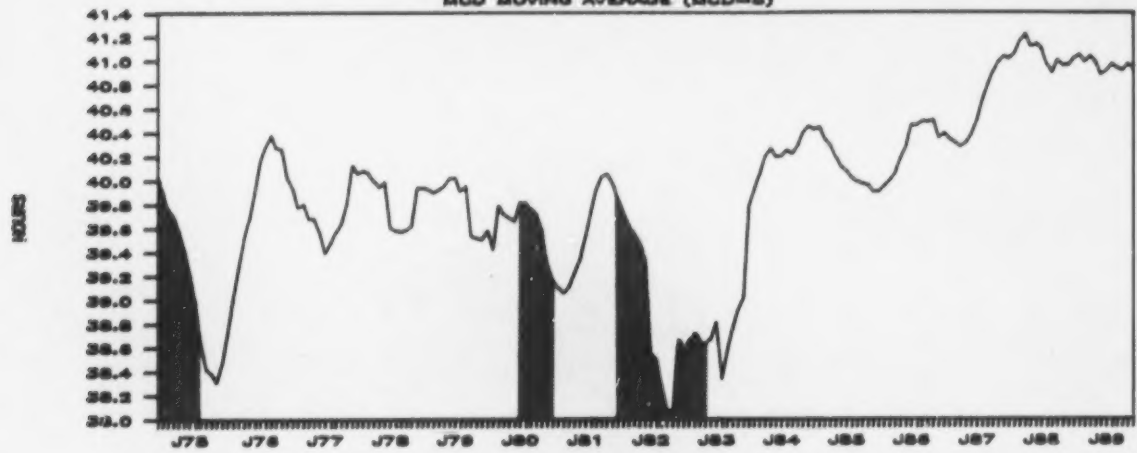


AVERAGE WEEKLY EARNINGS



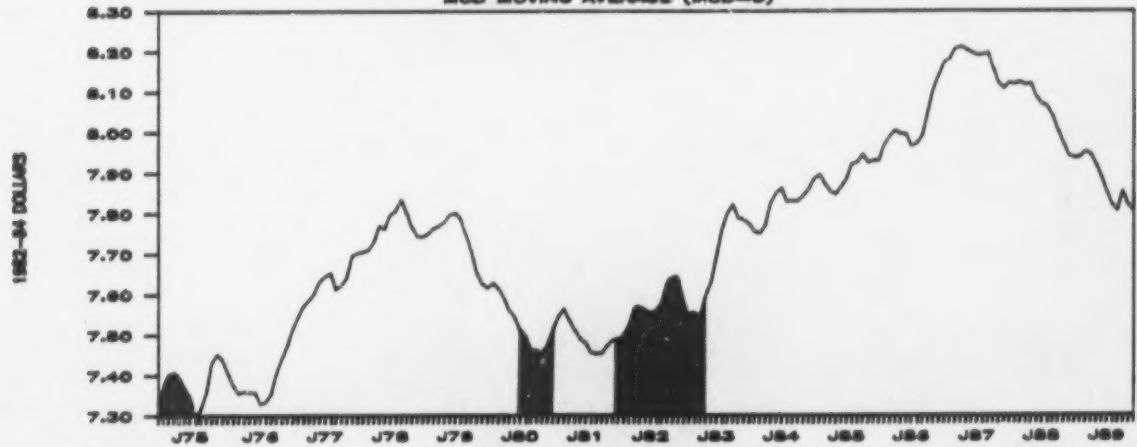
AVERAGE WORKWEEK

MCD MOVING AVERAGE (MCD=5)



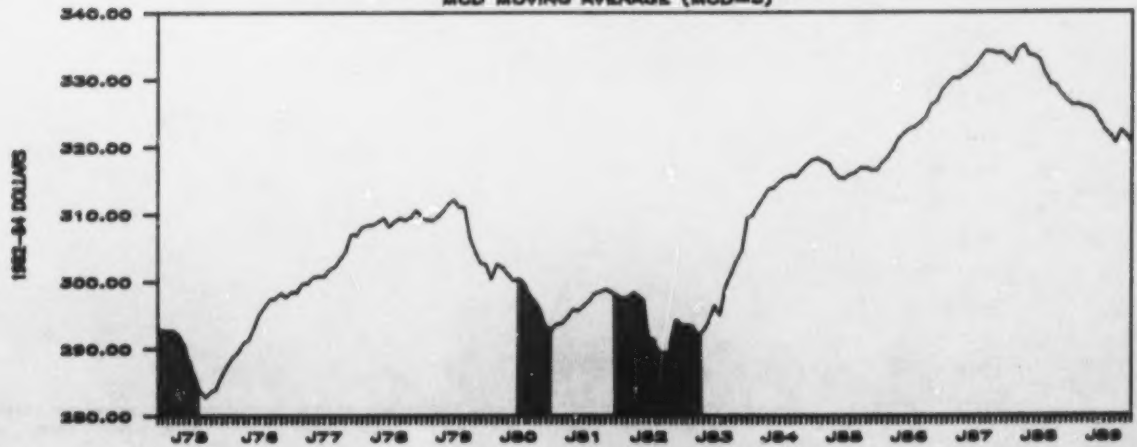
AV. HOURLY EARNINGS/CPI

MCD MOVING AVERAGE (MCD=3)



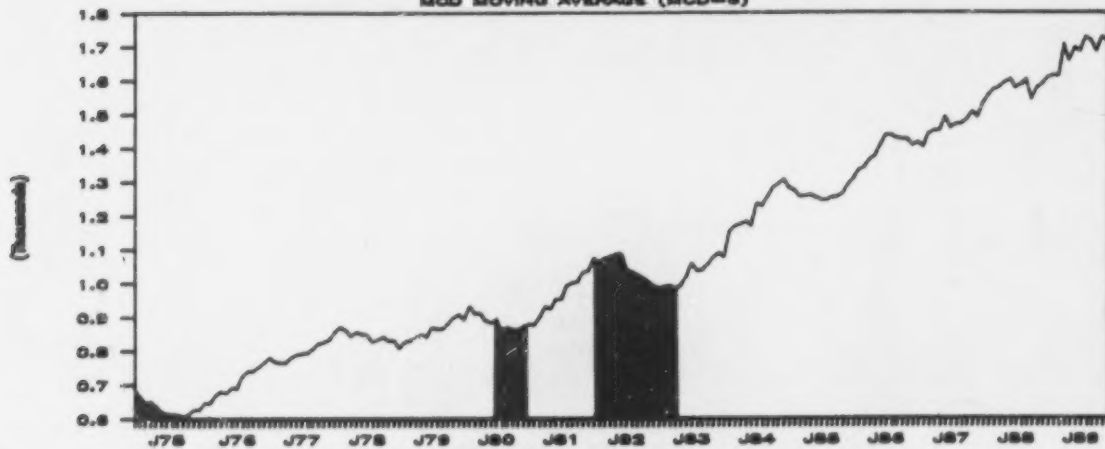
AV. WEEKLY EARNINGS/CPI

MCD MOVING AVERAGE (MCD=5)



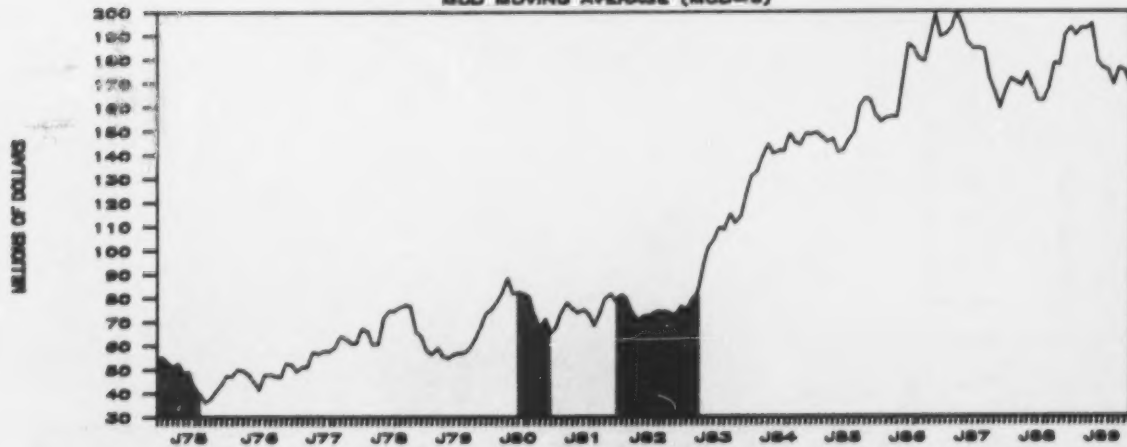
NEW BUSINESS INCORPORATIONS

MOD MOVING AVERAGE (MOD=8)



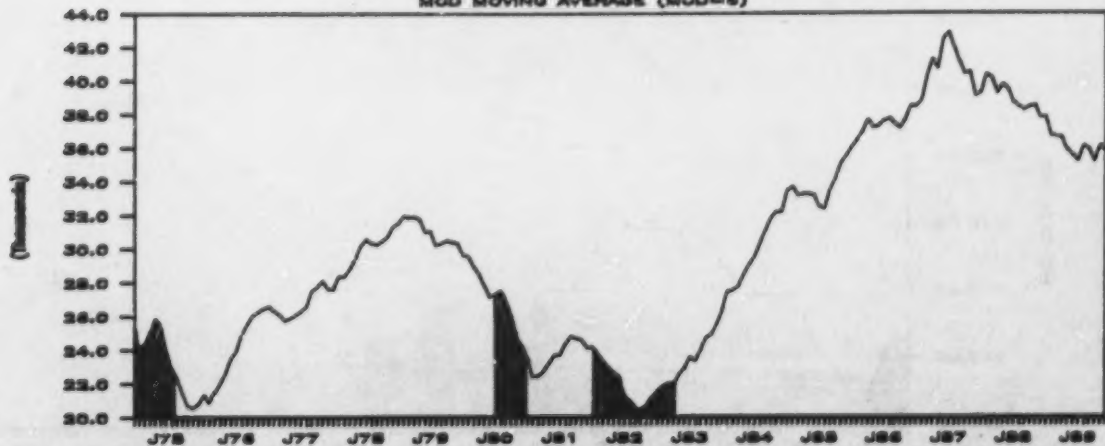
VALUATION OF BUILDING PERMITS

MOD MOVING AVERAGE (MOD=8)



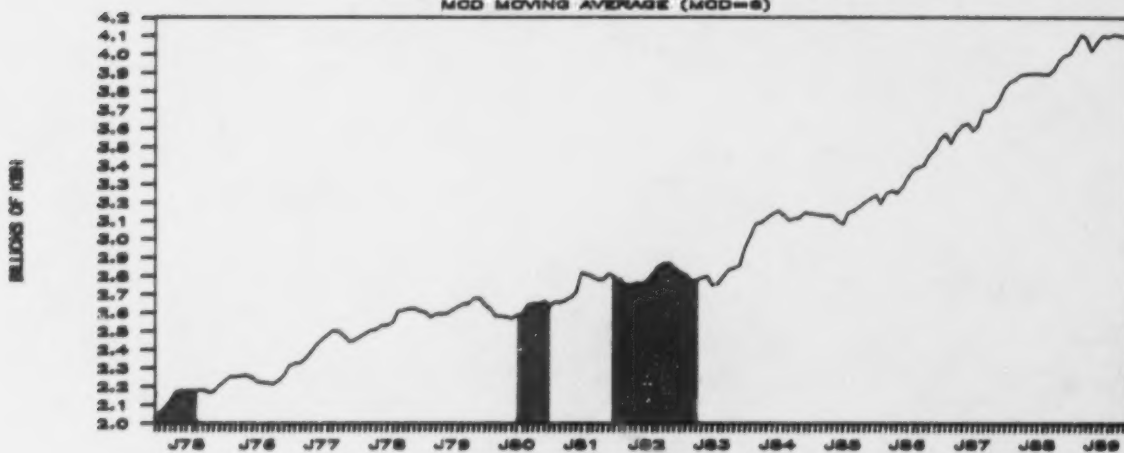
NEW VEHICLE REGISTRATIONS

MOD MOVING AVERAGE (MOD=8)



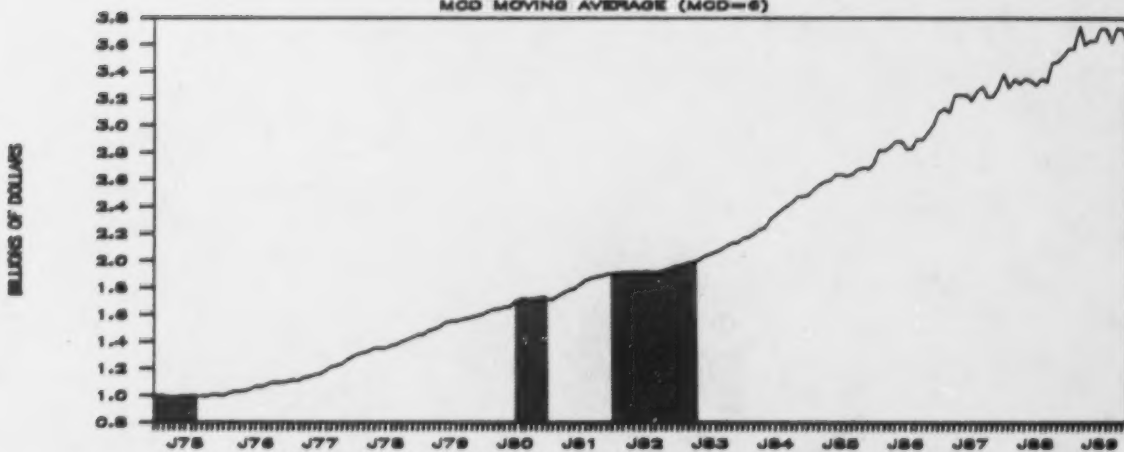
ELECTRICAL POWER SALES

MOD MOVING AVERAGE (MOD=6)



TAXABLE RETAIL SALES

MOD MOVING AVERAGE (MOD=6)



TAXABLE RETAIL SALES/CPI

MOD MOVING AVERAGE (MOD=6)

